

19990923.qrp v01_n587.qrl.990923

Date: Thu, 23 Sep 1999 19:03:06 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1587

QRP-L Digest 1587

Topics covered in this issue include:

- 1) [51034] 2N2/40 VFO and Stray Capacitance
by "Randy Jouett" <rules@bellsouth.net>
- 2) [51035] Re: velcro tie-wraps
by K10J <k10j@ditdit.com>
- 3) [51036] RE: 60 years!
by "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
- 4) [51037] Re: 2N2/40 VFO and Stray Capacitance
by "Larry Przyborowski" <lprzyski@erols.com>
- 5) [51038] Re: 2N2/40 VFO and Stray Capacitance
by "John J. McDonough" <jjmcd@tm.net>
- 6) [51039] FS+ Index Labs QRP+/ Companion
by Ken Edwards <ken.edwards@oit.gatech.edu>
- 7) [51040] Re: 2N2/40 VFO and Stray Capacitance
by "Nick Kennedy" <nkennedy@cswnet.com>
- 8) [51041] Re: velcro tie-wraps
by VE3JC - John C <jbcumming@wwdc.com>
- 9) [51042] QRPer near Liverpool
by "Buck, Preston D" <BuckPD@corning.com>
- 10) [51043] Re: 2N2/40 VFO and Stray Capacitance
by K2UD@aol.com
- 11) [51044] Attn. maybe QRPP ops! November Sweeps @ mW power
by Jim Hale <kj5tf@yahoo.com>
- 12) [51045] Re: velcro tie-wraps
by Dave Marling <dbm@klis.com>
- 13) [51046] Check-in AR QRP 40m Net
by "Terry Bassett" <mutabut@net66.com>
- 14) [51047] Re: [Fwd: Homebrewers]
by "Philip G. Collier" <borealis@juno.com>
- 15) [51048] SLV
by <SFIKE@twa.com>
- 16) [51049] Important NEWS !!!!!
by "George Goodroe" <goodroe@worldnet.att.net>
- 17) [51050] RE: OT: I'll be away for a while
by "Kory Hamzeh" <kory@avatar.com>
- 18) [51051] getting broken slugs out of coils -- how??
by "Dave Benham" <dodgeboy@mindspring.com>
- 19) [51052] Ft. Smith QRPer's take show on the road ...

- by "Nick Kennedy" <nkennedy@cswnet.com>
- 20) [51053] Electronics Book Source
by Michael Melland <badger@vbe.com>
- 21) [51054] Re: getting broken slugs out of coils -- how??
by K10J <k10j@ditdit.com>
- 22) [51055] DSW 40 up and running
by Addi Pittman <cornea@vsta.com>
- 23) [51056] Re: [Fwd: Homebrewers]
by "Dan W. Dooley" <dandooley@pipeline.com>
- 24) [51057] Re: FS Emtech NW40 & other stuff
by flyer@hooked.net
- 25) [51058] Fireball vs. RTTY this weekend?
by S LYON <sslyon@worldnet.att.net>
- 26) [51059] Fireball vs. RTTY this weekend?
by S LYON <sslyon@worldnet.att.net>
- 27) [51060] You might be an engineer if ...
by LENNY WINTFELD <w2bvh@home.com>
- 28) [51061] Re: You might be an engineer if ...
by Rich Wilkerson <richqrp@home.com>
- 29) [51062] OT: K7QO has landed in AZ
by "Chuck Adams, K7QO" <k7qo@hotmail.com>
- 30) [51063] CQC Meeting Pictures
by "Marshall Emm" <mgemm@emtechnologies.com>
- 31) [51064] You Just Never Can Tell...
by "Steve Yates, AA5TB" <aa5tb@swbell.net>
- 32) [51065] Cleaning out the shack
by "Lynn Simons" <lynnsimons@mindspring.com>
- 33) [51066] What does it take to get to Hell?
by Dan Puckett <dpuckett@erinet.com>
- 34) [51067] QRP Afield Report- W1FMR
by "David Benson" <nn1g@earthlink.net>
- 35) [51068] WTB Auttek QF-1A
by Duane Alles <w9zm@yahoo.com>
- 36) [51069] 1:1 SWR
by "Dave Fifield" <fifield@pacbell.net>
- 37) [51070] Re: QRP Afield Report- W1FMR
by Bob Patten <n4bp@bc.seflin.org>
- 38) [51071] RE: Bencher paddles Allen wrenches
by "George Goodroe" <goodroe@worldnet.att.net>
- 39) [51072] Calibration source for DMM's (was: open circuit battery voltage)
by "Adam B. Kanis" <akanis@divis17.ped-gen.uiowa.edu>
- 40) [51073] Re: getting broken slugs out of coils -- how??
by "Richard E. Robinson" <rerobins@email.uncc.edu>
- 41) [51074] Re: 2N2/40 VFO and Stray Capacitance
by Bruce Kizerian <kizerian@ced.utah.edu>
- 42) [51075] Re: Purely Amazing - what can be done with rotten set ups
by Michael Neverdosky <mneverdosky@earthlink.net>
- 43) [51076] Re: getting broken slugs out of coils -- how??

- by "Brad Bradfield, PE" <b_bradfield@yahoo.com>
- 44) [51077] Re: Resistor Lead Forming Tool
by Karl.Kanalz@optelinc.com
- 45) [51078] Re: What does it take to get to Hell?
by "Edward A Kwik jr" <eakwikjr@hti.com>
- 46) [51079] Re: QRP Afield Report- W1FMR
by Tim Ahrens <tahrens@hilconet.com>
- 47) [51080] Re: DSW 40 up and running
by "David Benson" <nn1g@earthlink.net>
- 48) [51081] Re: 1:1 SWR
by Phil Wheeler <w7ox@mindspring.com>
- 49) [51082] DCTL ANTENNA
by ARDUJENSKI@aol.com
- 50) [51083] Has anyone tried 2 pieces of coax as balanced feeder ?
by WB9MII@aol.com
- 51) [51084] Re: Resistor Lead Forming Tool
by Russ Dow <n7dw@garlic.com>
- 52) [51085] Re: Has anyone tried 2 pieces of coax as balanced feeder ?
by "Mike Yetsko" <myetsko@insydesw.com>
- 53) [51086] Re: QRP Afield Report- W1FMR
by Jeff Francis <jfrancis@frii.com>
- 54) [51087] Re: Resistor Lead Forming Tool
by "Mike Yetsko" <myetsko@insydesw.com>
- 55) [51088] AR QRP 40m Net Results
by Robspark@aol.com
- 56) [51089] RE: 2N2/40 VFO and Stray Capacitance
by "ai2q" <ai2q@ispchannel.com>
- 57) [51090] Re: Electronics of Radio, by Rutledge: seen it yet?
by Jeff Logullo <logullo@mindspring.com>
- 58) [51091] Report from Newbie with a PIXIE
by pppdlg <pppdlg@gci.net>
- 59) [51092] Re: Resistor Lead Forming Tool
by "Steve Sorrell" <ap036@detroit.freenet.org>
- 60) [51093] Re: Has anyone tried 2 pieces of coax as balanced feeder ?
by "Hugo Catta" <h.catta@worldnet.att.net>
- 61) [51094] Re: QRP Afield Report- W1FMR
by Bob Patten <n4bp@bc.seflin.org>
- 62) [51095] Re: FS: QRP Transceivers
by "Tedd Wong" <wong_te@hotmail.com>
- 63) [51096] Re: Resistor Lead Forming Tool
by Bob Patten <n4bp@bc.seflin.org>
- 64) [51097] Manhattan pad capacitance
by Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>
- 65) [51098] QRPTTF Log
by Greg Weinfurtner <weinfurt@oak.cats.ohiou.edu>
- 66) [51099] Re: 1:1 SWR
by "Donny" <dsirait@centrin.net.id>
- 67) [51100] Hf conditions.....?

- by "Greg Heath" <gheath1@nycap.rr.com>
- 68) [51101] Re: Hf conditions.....?
by Chris Taylor <cht@imipolex-g.com>
- 69) [51102] Re: Hf conditions.....?
by "Dieter Gentzow - WB8QYY" <wb8qyy@one.net>
- 70) [51103] QRP column on ARRL web site
by "Mike Czuhajewski" <wa8mcq@erols.com>
- 71) [51104] Re: Hf conditions.....?
by Dave Pomeroy <dave_pomeroy@yahoo.com>
- 72) [51105] Pacificon 2N2/40 and Regen Receiver Building Contests
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 73) [51106] More on ULS
by The Boices <boice@bigfoot.com>
- 74) [51107] Re: 2N2/40 VFO and Stray Capacitance
by "Randy Jouett" <rules@bellsouth.net>
- 75) [51108] Re: 2N2/40 VFO and Stray Capacitance
by "Randy Jouett" <rules@bellsouth.net>
- 76) [51109] Re: 2N2/40 VFO and Stray Capacitance
by "Randy Jouett" <rules@bellsouth.net>
- 77) [51110] Re: 2N2/40 VFO and Stray Capacitance
by "Randy Jouett" <rules@bellsouth.net>
- 78) [51111] Scope Manual needed
by Lamborn@onlinecol.com
- 79) [51112] Also in QST...
by Chris Cartwright Sr <ccart@phideaux.com>
- 80) [51113] Test - do not read
by "Bill Todd" <zapzap73@hotmail.com>
- 81) [51114] Re: Hf conditions.....?
by James Owen <james.owen@nist.gov>
- 82) [51115] Re: 1:1 SWR
by "Mike Yetsko" <myetsko@insydesw.com>
- 83) [51116] Plaudits for BIRD
by wj5o@juno.com
- 84) [51117] re: QRP+ / paddles etc.
by Paul Erickson <paule@sfu.ca>
- 85) [51118] PIXIE II mods//long text file
by charles k brown <n4so@juno.com>
- 86) [51119] QRP+ MOD ARTICLES
by ARDUJENSKI@aol.com
- 87) [51120] LOOKING FOR OLD QRP-L ARTICLES
by ARDUJENSKI@aol.com
- 88) [51121] Tube Transmitter Kits
by charles k brown <n4so@juno.com>
- 89) [51122] Tektronix Manuals/Parts
by charles k brown <n4so@juno.com>
- 90) [51123] Old Crystals
by "wayne reed" <wlreed@custom.net>
- 91) [51124] Re: 2N2/40 VFO and Stray Capacitance

- by K2UD@aol.com
- 92) [51125] RE:K5FO / K7QO THANKS!
by Michael <mike_mhe@compuserve.com>
- 93) [51126] Re: Manhattan pad capacitance
by "Jim Kortge, K8IQY" <jokortge@prodigy.net>
- 94) [51127] RE: 2N2/40 VFO and Stray Capacitance
by "ai2q" <ai2q@ispchannel.com>
- 95) [51128] HELP--Info on "Front End Saver"
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 96) [51129] Re: 2N2/40 VFO and Stray Capacitance
by "Steven Weber" <kd1jv@moose.ncia.net>

Date: Wed, 22 Sep 1999 18:10:10 -0500
From: "Randy Jouett" <rules@bellsouth.net>
To: "Low Power Amateur Radio Discussion" <grp-1@Lehigh.EDU>
Subject: [51034] 2N2/40 VFO and Stray Capacitance
Message-ID: <023601bf054f\$e67a6740\$46e498cd@spock>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi, Gang, and fellow 2N2/40 builders.

I started throwing together a 2N2/40 today,
and I have a couple of questions concerning
the possibility of stray capacitance from the
use of a double-sided pc board and Manhattan
construction pads. Don't know if I should be
worrying about this, but I tend to be a perfectionist
when it comes to construction :^).

Anywho, I'm getting ready to build the VFO and
decided to get out the bible -- Solid State Design,
of course! -- and read up on VFO construction.
While reading, I came up upon this little tidbit on
page 33, last paragraph:

"Double-sided pc boards are not recommended
in VFOs...at least not in the frequency-determining
part of the circuit. The pc board, if double-sided,
provides numerous unwanted capacitance wherever
the circuit foils are formed. The dielectric material
of the pc board (phenolic or glass epoxy) is not
especially stable with regard to changes in temperature

and humidity, and drift can result from the double-sided board approach."

With all this in mind, I was wondering if it would be worth the time and trouble of removing the bottom layer of copper on my double-sided board under the VFO? Also, has anyone determined the capacitance of an average-sized manhattan pad and calculated its stray-capacitance effects in critical areas of the circuit? Should I even use manhattan construction techniques in the VFO or other oscillators and just put those sections together using ugly construction? Am I being too damn picky again as usual? :^)

I was thinking about using not worrying about this just yet, building the rig, and then take an Xacto knife to the underside of the VFO foil, cutting away small strips under the frequency-determining sections of the VFO, and then looking to see if I notice any frequency-stability improvement. Since I'm a few weeks from completion, I was wondering if anyone out there was willing to do this test and see what gives? If not, I'll let "y'all/you guys/you'uns -- that should cover most of the country! :^) -- know what's what when I have the thing on the air and try it myself :^).

Anywho, any help or advice would be appreciated!

72/73,

Randy Jouett, AB5NI

Date: Wed, 22 Sep 1999 18:17:31 -0500

From: K10J <k10j@ditdit.com>

To: n5ib@juno.com, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [51035] Re: velcro tie-wraps

Message-ID: <004701bf0550\$a5939b60\$3cb83ed8@swbell.net>

MIME-version: 1.0

Content-type: text/plain; charset="iso-8859-1"

Content-transfer-encoding: 7bit

Howdy All...

I am an xray service engineer. We buy a similar device by the case of 5000. Each is about 1 inch wide and 8 inches long. The majority of the length is

'loop' and the last 2 inches is 'hook'. When installing a cath lab or such, we use them to temporarily bundle system cables. Most of them are removed at completion of system check out. These work very nicely around the 'shack'.

OJ---K10J
dit dit
..

Date: Wed, 22 Sep 1999 19:34:28 -0400
From: "T.J. \"SKIP\" Arey N2EI" <tjarey@home.com>
To: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [51036] RE: 60 years!
Message-ID: <37E96784.76E617E5@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

In spite of his tirads Ole' Uncle Wayne is a Life Member to boot!!!

--

+++++

T.J. "SKIP" AREY N2EI e-mail tjarey@home.com

Website <http://members.home.net/tjarey>

Snail Mail: PO Box 236, Beverly, NJ 08010

Specialization is for insects! LAZARUS LONG

Date: Wed, 22 Sep 1999 19:39:59 -0400
From: "Larry Przyborowski" <lprzybski@erols.com>
To: <rules@bellsouth.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51037] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <004c01bf0553\$cd0451a0\$1c80accf@k3peg>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> I started throwing together a 2N2/40 today,
> and I have a couple of questions concerning

> the possibility of stray capacitance from the
> use of a double-sided pc board and Manhattan
> construction pads.

No need to worry about this when using "manhattan" construction. The stray capacitance won't enter into the picture since all your connection pads are above a continuous ground plane, and there are no "circuit foils" to speak of.

72, Larry - K3PEG -.-

Date: Wed, 22 Sep 1999 19:44:32 -0400
From: "John J. McDonough" <jjmcd@tm.net>
To: <rules@bellsouth.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51038] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <000c01bf0554\$6dd48820\$010044c0@conor-mac-nessa>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Randy

I think you'll be hard pressed to see any difference. First of all, remember that you don't have 'traces' in the classic sense. Sure, there is capacitance across the pads themselves (see K7Q0's study of this), and there is capacitance from the parts to the upper foil. But both of those are tiny compared to the capacitance between the sides of a double sided circuit board; the parts are far from the foil and the pads have little area. Since it's protected from the circuit by the upper foil, I doubt the lower foil enters into the equation at all.

Now, if you've looked at my web page, you can see I'm not the perfectionist Jim is. It's hard to believe my circuit works at all. Further, my first one I built with the wrong core - I used one that had too high a temperature coefficient since I didn't have a -7. That one drifts about 100 Hz in the first few minutes after power up. The second one, built with the correct core, doesn't drift enough I can tell. Ok, I don't have fancy test equipment, but the total drift has to be in the order of a few tens of cycles at most, or I would have detected it. If you can make a few percent improvement in this by carefully carving away the foil are you really going to be able to tell?

I am tempted to enclose the VFO, however. First, because on the first radio I got some parasitics as I moved the front panel cabling around, and the

second will be for 20, so the problem should be worse. But secondly, I noticed that I can cause the oscillator to move appreciably by blowing on it. I expect I'm differentially cooling the parts, but it would seem that sheilding the VFO from breezes inside the cabinet might be worthwhile. (It's also not clear to me whether it's the 2N2222 part of the VFO or the Epson oscillator that's moving).

So in a very long winded way what I'm saying is - don't bother!

72/73 de WB8RCR <http://www.qsl.net/wb8rcr/>
didileydadidah QRP-L #1446 Code Warriors #35

-----Original Message-----

From: Randy Jouett <rules@bellsouth.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Wednesday, September 22, 1999 7:16 PM
Subject: 2N2/40 VFO and Stray Capacitance

>Hi, Gang, and fellow 2N2/40 builders.

>

>

>I started throwing together a 2N2/40 today,
>and I have a couple of questions concerning
>the possibility of stray capacitance from the
>use of a double-sided pc board and Manhattan
>construction pads. Don't know if I should be
>worrying about this, but I tend to be a perfectionist
>when it comes to construction :^).

>

>Anywho, I'm getting ready to build the VFO and
>decided to get out the bible -- Solid State Design,
>of course! -- and read up on VFO construction.
>While reading, I came up upon this little tidbit on
>page 33, last paragraph:

>

>"Double-sided pc boards are not recommended
>in VFOs...at least not in the frequency-determining
>part of the circuit. The pc board, if double-sided,
>provides numerous unwanted capacitance wherever
>the circuit foils are formed. The dielectric material
>of the pc board (phenolic or glass epoxy) is not
>especially stable with regard to changes in temperature
>and humidity, and drift can result from the double-sided
>board approach."

>

>With all this in mind, I was wondering if it would be

>worth the time and trouble of removing the bottom
>layer of copper on my double-sided board under
>the VFO? Also, has anyone determined the capacitance
>of an average-sized manhattan pad and calculated
>its stray-capacitance effects in critical areas of the
>circuit? Should I even use manhattan construction
>techniques in the VFO or other oscillators and just
>put those sections together using ugly construction?
>Am I being too damn picky again as usual? :^)
>
>I was thinking about using not worrying about this
>just yet, building the rig, and then take an Xacto
>knife to the underside of the VFO foil, cutting away
>small strips under the frequency-determining sections
>of the VFO, and then looking to see if I notice any
>frequency-stability improvement. Since I'm a few weeks
>from completion, I was wondering if anyone out there
>was willing to do this test and see what gives? If not, I'll
>let "y'all/you guys/you'uns -- that should cover most of
>the country! :^) -- know what's what when I have the thing
>on the air and try it myself :^).
>
>Anywho, any help or advice would be appreciated!
>
>72/73,
>-----
>Randy Jouett, AB5NI
>
>

Date: Wed, 22 Sep 1999 19:55:56 -0400
From: Ken Edwards <ken.edwards@oit.gatech.edu>
To: qrp-l@Lehigh.EDU
Subject: [51039] FS+ Index Labs QRP+/ Companion
Message-ID: <199909222355.TAA13838@oit.gatech.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have an Index Labs transceiver (s/n 584) with Companion battery/tuner.
Would like to sell to buy some new gear. Asking \$450 for the pair.
Please email with an questions.
Thanks...
--Ken WA4SQM

Date: Wed, 22 Sep 1999 19:05:07 -0500
From: "Nick Kennedy" <nkennedy@cswnet.com>
To: <rules@bellsouth.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51040] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <006501bf0557\$4c952680\$867154d8@big>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I wondered about exactly the same thing when I started my 2N2/40 and also considered etching off the bottom of the VFO area. But the tests of running models showed them to be pretty stable. and when I thought about it, I realised that both the top and bottom foils are actually at ground potential, so capacitance between them oughta be N/A.

72,

Nick, WA5BDU

VFO and Mixer built so far ...

-----Original Message-----

From: Randy Jouett <rules@bellsouth.net>

>"Double-sided pc boards are not recommended
>in VFOs...at least not in the frequency-determining
>part of the circuit. The pc board, if double-sided,
>provides numerous unwanted capacitance wherever
>the circuit foils are formed. The dielectric material
>of the pc board (phenolic or glass epoxy) is not
>especially stable with regard to changes in temperature
>and humidity, and drift can result from the double-sided
>board approach."
>
>With all this in mind, I was wondering if it would be
>worth the time and trouble of removing the bottom
>layer of copper on my double-sided board under
>the VFO?

Date: Wed, 22 Sep 1999 20:08:18 -0400
From: VE3JC - John C <jbcumming@wwdc.com>
To: n5ib@juno.com

Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [51041] Re: velcro tie-wraps
Message-ID: <37E96F72.3E6DC94F@wwdc.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Please check out my "Flight of the Bumblebee '98 picture" at
<http://www.geocities.com/CapeCanaveral/Lab/7378/bb98.html>

If anybody is going to make a million from the royalties, it better be
me - been using a 2-sided velcro paddle leg strap for years! Tell you
what, Jim, I'll just take \$500K - you keep the rest.

72, John VE3JC

n5ib@juno.com wrote:

>
> Just visited the Whiterook web site < <http://ElectronicsUSA.com>>
> Well, shoot, just when I though I had an invention that I was going to
> tell y'all about.... anyway...
>

Date: Wed, 22 Sep 1999 20:17:13 -0400
From: "Buck, Preston D" <BuckPD@corning.com>
To: "'qrp-1'" <qrp-1@Lehigh.EDU>
Subject: [51042] QRPers near Liverpool
Message-ID: <9C472CF03C5ED111BBF20000F84A17010125BE0A@EAGLE.CORNING.COM>
Content-Return: allowed
Mime-Version: 1.0
Content-Type: text/plain

Greetings all,

Any QRPers near Liverpool, UK intersted in an eyeball QSO. I will be in
Manchester from 1-4 October. With the weekend free.

Or any good sites to see. Hadrian's wall, castles and battlefields are the
preference. Architectural antiques as it were. I got my international driver's
license today. I am worried though because I have always driven on the wrong side
of the road.

I will probably take my 2m rig but pass on the SW40.

73

Preston, n0glm, Southern NY State

Date: Wed, 22 Sep 1999 20:45:14 EDT
From: K2UD@aol.com
To: rules@bellsouth.net
Cc: qrp-l@lehigh.edu
Subject: [51043] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <5bc33f64.251ad21a@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi Randy,

Don't worry about the double-sided PCB. I wondered about the same thing you did, even recall reading the same thing about double-sided in VFO's. I can offer this:

As far as stability, the 2N2/40, built per the QRPP article, using the parts specified (NPOs where indicated) shows NO signs of drifting. I have even used it outdoors where the temperature changed dramatically one time. At the time, I had a stray wire going to the VFO coil. Bring your finger near, frequency changes. Even with the wind blowing that same wire around, the VFO just won't move!

I worked KD1JV who was using a DDS VFO in his 2N2/40. Neither of us seemed to waver in frequency.

We are not going through the PCB with this radio, so I would like to think that any stray capacitance due to double-sided PCB would be negligible at the most. Incidentally, I used single-sided for the pads in both of the 2N2s I built. They work identically, show the same level of stability.

Don't spend any time worrying about using double-sided board for the rig, even in the VFO area. It's been tested and proven by more than a few folks, and all that I've from or about can attest to the stability.

72

Howard Kraus, K2UD

Date: Wed, 22 Sep 1999 18:08:48 -0700 (PDT)
From: Jim Hale <kj5tf@yahoo.com>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [51044] Attn. maybe QRPP ops! November Sweeps @ mW power

Message-ID: <19990923010848.3035.rocketmail@web704.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Chris makes a good point. This contest coming up
November 6-8 and its the CW sweepstakes.

If you EVER want to try milliwattting this could be a
great opportunity. There's plenty of time to get ready.

Whatever method you use to figure power, be ready for
this contest. Just takes a little planning. Most of us
have at least two QRP rigs. Setup one of them for a
suitable milliwatt power. For example, the GM-xx rigs
will go right down to a couple hundred mW with an easy
internal adjustment.

Have another rig set for about 2-4w QRP just in case.

See how you do with the big gun stns with mW pwr 1st.

Wait till they call CQ and have no callers. Then jump
on them.

No matter what your power is, they will probably hear
you and gladly make a contest exchange.

See how many states you can work with 200-300mW. You
will be HOOKED!

Warning! Soon 200mW will seem like mountains of power!

You have milliwatt fever now!

If you do alright with mW's & stateside stns I have a
suprize for you. DX is easier to work with mW than USA
stns. ;-)

And dont forget the ARCI Fall QSO Party on October
9-10th. Plenty of good ears here too.

Maybe pretty soon we'll have a mW contest, or a sub
category at least in some of the contests.

Enjoy! Jim KJ5TF

>For the "maybe" QRPper's out there, the November
>Sweeps are coming up, and

>this brings out the best ops with the best antennas
>and skills. This
>could be a great start on getting Milli-WAS under
>your belt. I know Jim
>and I will be out there hunting with pea shooters,
>(even if it is an
>FT1000D at 20mW:) anyone else? I'm planning on
>running 25mW's on the Icom
>735 as my "high" power, might even wax the twinlead
>to make the mW's fly
>off better:) Could there be a mW
sub-contest/co->contest to Sweeps?72
>-- Chris Cartwright, Technical Engineer |
>ccart@phideaux.com --
>-- N3XRV ARRL-VE Norcal Zombie #163 |
>Gaithersburg, MD FM19je --
>-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS
#5028 QRP-ARCI #9271 --

Do You Yahoo!?
Bid and sell for free at <http://auctions.yahoo.com>

Date: Wed, 22 Sep 1999 22:32:43 -0300
From: Dave Marling <dbm@klis.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51045] Re: velcro tie-wraps
Message-ID: <37E9833B.5950A98B@klis.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Widely used in the structured cabling field to avoid deforming data
cable and messing up the max data rate. Roughly a buck each here in
Canada. Reusable, unlike most of the nylon ones.

Dave
VE1VQ

Date: Wed, 22 Sep 1999 20:39:04 -0500
From: "Terry Bassett" <mutabut@net66.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [51046] Check-in AR QRP 40m Net
Message-ID: <000501bf0564\$89d57740\$455e8bce@host.net66.com>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello All,

Well, I checked into the AR-QRP Net tonight. Once again I learned some things...When NQ5RP got down the list and called me, I started off giving him Name & Qth as requested. Then got some on-target QRM that gave a fit to my Clear Speech DSP Speaker. While sending with right hand I tried to reach behind the rig to pull the cable for the DSP Speaker out of the jack. I got that accomplished, but apparently jiggled one of my many other wires and/or cables and don't think from that point on I was getting out at all. This rig (Icom 707 @ 4 Watts) is not Full Break-in and just before I got to the 72's part I looked at my OHR WM-2 and needle wasn't moving! As my receiver recovered, the Qrm(SSB?) was still there and I could no longer hear NQ5RP.

That's a shame because just before NQ5RP called me, he came up out of the noise very well. I figured I'd be getting a nice signal back to him, but Mr. Murphey does Qrm very well and it got the best of me this time around. Next time I'll just let the Qrm be and keep transmitting while resisting the temptation to make a station change during contact. It sure seemed like the thing to do at the time, but it didn't work worth a hoot.

On another subject I went to Chuck's page and read up on the QRQ system notes. I took my Vibroplex Brass Racer apart, cleaned it up and tried setting it up per some suggestions on his page. I must admit it seems to be working a little better for me now.

So it is onward and upward, I'm learning some contesting lessons, some Net operation lessons and trying to improve code sending and overall speed. Things are starting to cook at Station KA9TXE...

72,

Terry, KA9TXE East Central Illinois

Date: Wed, 22 Sep 1999 21:13:45 EDT
From: "Philip G. Collier" <borealis@juno.com>
To: qrp-l@lehigh.edu
Subject: [51047] Re: [Fwd: Homebrewers]
Message-ID: <19990922.214928.-288367.0.borealis@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

On Sat, 18 Sep 1999 08:32:37 -0700 "Frank Grigaliunas" <fgrig@iea.com>
writes:

>I guess people like to take their aggression out the consumer
> electronics that bedevil them.

Yeah, it kinda reminda me of Springsteen's "57 Channels and Nothing On."

Bought a 44 magnum with a solid steel cast
In the blessed name of Elvis and just let it blast
till my TV lay in pieces and my remote too...

Of course, no self respecting ham would do a thing like that. Unless
there are lots of nice parts to salvage! Sony's dead, give it one more
round <g>.

BTW, is there any more info on the great 44 Mag QRP radio? Might make a
nice autumn project.

72,
Phil Collier KG2DH

Get the Internet just the way you want it.
Free software, free e-mail, and free Internet access for a month!
Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

Date: 22 Sep 1999 21:02:39 LOC
From: <SFIKE@twa.com>
To: <qrp-1@lehigh.edu>
Subject: [51048] SLV
Message-ID: <19990922.210239.SFIKE@twa.com>

Okay gang, I have been wanting to build a St. Louis Vertical antenna, but I
have already run into a problem. I know this may have been asked a hundred
times before, so make it a hundred and one.
I went to Bass Pro Shops & Cabellas pages to see if I could order either SD20
or the Black Widow 20' telescoping rod, but the searches come up negative on
both pages. Now, I know I may be slightly out of fishing season, but shouldn't
they still have them in their warehouses or did they discontinue them?
I also read recently off the reflector about some 40' telescopic graphite pole.

Where do you get this beast? How small does it collapse to? But most importantly, are there any plans for constructing an antenna out of it? Also, at this years feild-day, I saw a QRPer using a telescopic surveyors pole as a center support for his inverted-V (wonderfull idea). He said he bought it off of a retired surveyor so he didn't know where I could one. I wonder if someone could possibly point me in the direction (no pun intended) of a supplier of surveyors equipment so I might look into buying one? Any help would be greatly appreciated!
Thanks in advance
Scott
72

Date: Wed, 22 Sep 1999 22:05:29 -0400
From: "George Goodroe" <goodroe@worldnet.att.net>
To: <w4dug@onelist.com>, <cars@k4ksa.org>, "Qrp-L@Lehigh.Edu (E-mail)" <qrp-l@Lehigh.EDU>, <ares@k4ksa.org>
Cc: <erics@elecraft.com>
Subject: [51049] Important NEWS !!!!!
Message-ID: <000301bf0568\$284659a0\$3274fea9@ggoodroe>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Attention one and all!!!!

Elecraft, the designers and manufacturers of one of the hottest HF radios on the market, The Elecraft K2, will be attending the Tampa Florida Convention on November 20th and 21st. Visit their website at <http://www.elecraft.com> .

Eric Schwartz WA6HHQ, will be doing 2 forums. One will be on HF Radio today, and will probably cover homebrewing, the coming sunspot cycle, and allot of other informative topics. In the 2nd forum, Eric will perform a K2 demo. This will surely be one of the hottest forums for the weekend.

We will see you there in November...be sure to get your tickets early.

For convention information please visit <http://www.fgcarc.org>

Thanks and 73 de KF4CPJ
George Goodroe, QRP-L #1943
St. Petersburg, Florida USA
80 Meter high noise capital of the USA <grin>
<http://home.att.net/~goodroe>
<http://www.qsl.net/kf4cpj>

Date: Wed, 22 Sep 1999 19:08:31 -0700
From: "Kory Hamzeh" <kory@avatar.com>
To: <qrp-1@lehigh.edu>
Subject: [51050] RE: OT: I'll be away for a while
Message-ID: <005b01bf0568\$88a02ec0\$14ce21c7@tomcat.avatar.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dear QRP-L list members,

I'm quite elated and overwhelmed by all of the kind messages that I've received from everyone on this (and the elecraft) list. Thank you everyone for the kind words and the best wishes. You guys and gals are a wonderful bunch of people.

73 & take care,
Kory
AC6RN

> >Due to a JRA, I'm going to the hospital for a hip replacement
> this Thursday.
> >I should be gone for about a week. After that, health
> permitting, I shall be
> >back on the air and back on this list. Then maybe I can finish my K-2!
> >

Date: Wed, 22 Sep 1999 22:10:32 -0400
From: "Dave Benham" <dodgeboy@mindspring.com>
To: <qrp-1@Lehigh.EDU>
Subject: [51051] getting broken slugs out of coils -- how??
Message-ID: <01e501bf0568\$d13df720\$e40e8ad1@hqa.chrysler.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Seeing the recent thread on the low power HW8 reminded me of an age-old

problem I've had with my HW8. One of the cores cracked and I can't get the thing out. It won't turn because the core expands and lets the hex driver spin around inside. It won't push out because of the threads. Somewhere I once read of a slick way to remove them without destroying the coil form or the rig, but I'm over 50 and can't even remember what I had for breakfast today much less that trick. Any ideas?

Thanks.

Dave K8TRF

Date: Wed, 22 Sep 1999 21:08:51 -0500
From: "Nick Kennedy" <nkennedy@cswnet.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51052] Ft. Smith QRPers take show on the road ...
Message-ID: <009f01bf0568\$95a1a680\$867154d8@big>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

Last night, the local ham club here in Russellville (central Arkansas) enjoyed a presentation by some QRP mainstays from the Fort Smith group. We had about thirty folks at our meeting in Ryan's Steakhouse. This was up from our usual number, no doubt because we had announced Jay's traveling medicine show in the newsletter.

Jay (W5JAY) does a great job communicating his enthusiasm for QRP. In fact, his usually quieter co-presenter Kelsey (KK5KU) sometimes has to slow Jay down when he starts talking faster than he thinks. But enthusiasm is just what a lot of jaded hams who are bored with the same old stuff need. The guys brought along some nice toys for show and tell. A red hot radio, a cool blue DSW and the sophisticated K2. I wonder if Jay was a little nervous when he passed the red and blue ones around for the crowd to inspect up close. How come you didn't pass around the K2, Jay?

Jay's talking points dispelled a few negative myths about QRP and highlighted the positive things going on in the movement. Portable operation, contests, fox hunts, QRPP, camaraderie, technical innovation and the fact that kit building thrives in the QRP world despite the passing of Heathkit. And that these kits yield high performance rigs that any ham would be proud to own.

After Jay's prepared spiel ended, a group of local hams crowded in close for a look at the tiny rigs. One local member ran coax from the mobile whip on his car through the door and into the restaurant so Jay could at least give a receive-only demo of the three little rigs. They sounded great, but it

was a real surprise when we called an Ohio station and were able to have a solid QSO on the RHR. Imagine that, a QSO from a table in a steak house using a mobile whip in the parking lot. You want fries with that red hot radio?

The moral of the story is--here s a good thing to suggest to the program chairman of your local club. If you don t have an evangelical QRPer in your local group, maybe there s one (or several) in driving distance who ll come and preach the word to the locals. Thanks Jay.

Nick, WA5BDU

Date: Wed, 22 Sep 1999 21:14:21 -0500
From: Michael Melland <badger@vbe.com>
To: qrp-l@lehigh.edu
Subject: [51053] Electronics Book Source
Message-ID: <37E98CFC.833449CF@vbe.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I've had several e-mails asking about the discounted "The Art of Electronics" I purchased from Bookpool LLC. Below is the url and other info so you can check them out and search for books on their site. One of the Proffessors at the University of Wisconsin gave me the info on the site earlier in the week. BTW "The Art of Electronics" is back in stock and shipping as of today..... I was notified my copy shipped.

Tech Books to 49% Off!	Unbeatable Discounts on Tech Books!
http://www.bookpool.com	Bookpool LLC, PO Box 387
bookpool@bookpool.com	Vineyard Haven, MA 02568, USA

73

--
Michael Melland, W9WIS
Winneconne, Wisconsin, USA
FISTS #4387, 10-10 #69281, QRP-L #1656,
QRP-ARCI #9875, AK/QRP #478, NorCal
CW, SSB, and Electronics

List Administrator: grundig@qth.net
<http://www.qsl.net/w9wis>

Date: Wed, 22 Sep 1999 21:30:32 -0500
From: K10J <k10j@ditdit.com>
To: dodgeboy@mindspring.com, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51054] Re: getting broken slugs out of coils -- how??
Message-ID: <008a01bf056b\$9fc09060\$3cb83ed8@swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7bit

Howdy..
I use a Q-tip with just a touch of super glue. Not too much! Let it dry and then unscrew it.

OJ---K10J
dit dit
..

Date: Wed, 22 Sep 1999 21:32:18 -0500
From: Addi Pittman <cornea@vsta.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51055] DSW 40 up and running
Message-ID: <37E99131.2DA963CA@vsta.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello QRP'ers, Ive just finished my DSW 40 and it works!!! I really like it. My first contact was with ww5xx, a friend of min who just happened to be on 7040 Sat morning and answered my CQ. What a joy it was. This rig sure has lots of bells and whistles for a small thing. I have two problems Id like some input on. First when keying I get an rf feedback sound in the audio. It is very soud and makes keying difficult. I do not have this rig in an enclosure. It it put together with clip leads and laying on a desk. I took a picture of it in this state to send to ww5xx my first contact with it. Has anyone else had this problem and is the solution to put it in an enclosure? Next the output is 1.25 watts measured on the wm2 transmitting into a dummy load. Is there a way to peak this power out? I cant fine one. What output do the DSWs actually

get out there? Ill keep you posted on my progress, and I hope to work as many of you as I can. This rig looks like it will become my new backpacking rig, due to its small size. Im sure I can get these glitches worked out.

Adios from South Texas, Bob K5EYE

Date: Wed, 22 Sep 1999 21:58:09 -0500
From: "Dan W. Dooley" <dandooley@pipeline.com>
To: <borealis@juno.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [51056] Re: [Fwd: Homebrewers]
Message-ID: <00f001bf056f\$78736380\$4b83aec7@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ouch, that last round just destroyed that beautiful HV power transformer...

Dan WB5TKA

>
>Of course, no self respecting ham would do a thing like that. Unless
>there are lots of nice parts to salvage! Sony's dead, give it one more
>round <g>.

Date: Wed, 22 Sep 1999 20:25:59 +0000
From: flyer@hooked.net
To: qrp-l@lehigh.edu
Subject: [51057] Re: FS Emtech NW40 & other stuff
Message-ID: <199909230322.UAA14581@wenet.net>

Date sent: Wed, 22 Sep 1999 15:30:24 +0000
Send reply to: flyer@hooked.net
From: flyer@hooked.net
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: FS Emtech NW40 & other stuff
Originally to: qrp-l@lehigh.edu

Thanks all for your offers to buy the NW40, etc. I have accepted offers for all items, but I am saving all other offers in case something falls through.

Thanks again.

Mark Smith

Date: Wed, 22 Sep 1999 23:36:17 -0400
From: S LYON <sslyon@worldnet.att.net>
To: qrp chat <qrp-l@Lehigh.EDU>
Subject: [51058] Fireball vs. RTTY this weekend?
Message-ID: <37E9A031.536E2763@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

any o-pines as to whether it will be a QRO RTTY stampeed this weekend?
Your answers will determine whether I

1.) make the considerable effort to climb the hard face of Mt Beacon, erect the EDZ DEATH RAY and pound a barefoot Farball into the ether, or

2.) stay home on the deck with coffee and croissants, philosophising about fate, ultimate truth, sanctity of milli-Watting, etc., etc.

72

-s-

--

'Seab' Lyon - AA1MY
Beacon NY USA FN-31
QRP-L 574 ARCI 9253

Date: Wed, 22 Sep 1999 23:37:47 -0400
From: S LYON <sslyon@worldnet.att.net>
To: qrp chat <qrp-l@Lehigh.EDU>
Subject: [51059] Fireball vs. RTTY this weekend?
Message-ID: <37E9A08B.553B93A5@worldnet.att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

any o-pines as to whether it will be a QRO RTTY stampeed all over us

Furballs this weekend? Your answers will determine wether I:

1.) make the considerable effort to climb the hard face of Mt Beacon,
erect the EDZ DEATH RAY and pound a barefoot Farball into the ether, or

2.) stay home on the deck with coffee and croissants, philosophising
about fate, ultimate truth, sanctity of milli-Watting, etc., etc.

72

-s-

--

'Seab' Lyon - AA1MY
Beacon NY USA FN-31
QRP-L 574 ARCI 9253

Date: Thu, 23 Sep 1999 00:27:12 -0400
From: LENNY WINTFELD <w2bvh@home.com>
To: qrp-l@lehigh.edu
Subject: [51060] You might be an engineer if ...
Message-ID: <37E9AC20.CE313D19@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Here is a copy of today's joke from www.joke-of-the-day.com.

Doesn't seem like a joke to me ;)

Lenny Wintfeld w2bvh

YOU MIGHT BE AN ENGINEER IF ...
- Submitted by Uri Dub

... choosing to buy flowers for your girlfriend or upgrading
your RAM is a moral dilemma.
... you take a cruise so you can go on a personal tour of the
engine room.
... the sales people at the local computer store can't answer
any of your questions.
... you bought your wife a new CD-ROM drive for her birthday.
... you can quote scenes from any Monty Python movie.
... you can type 70 words per minute but can't read your own
handwriting.
... you comment to your wife that her straight hair is nice

and parallel.
... you have saved every power cord from all your broken
appliances.
... you have more friends on the Internet than in real life.
... you know what http:// stands for.
... you look forward to Christmas so you can put the kids'
toys together.
... you see a good design and still have to change it.
... you window shop at Radio Shack.
... your laptop computer costs more than your car.
... your wife hasn't the foggiest idea of what you do at work.
... you've already calculated how much you make per second.
... you've tried to repair a \$5 radio.

Date: Wed, 22 Sep 1999 21:35:05 -0700
From: Rich Wilkerson <richqrp@home.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51061] Re: You might be an engineer if ...
Message-ID: <37E9ADF9.3DA8D070@home.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> YOU MIGHT BE AN ENGINEER IF ...
> - Submitted by Uri Dub
> -----

> ... the sales people at the local computer store can't answer
> any of your questions.
> ... you bought your wife a new CD-ROM drive for her birthday.

> ... you can type 70 words per minute but can't read your own
> handwriting.

> ... you have saved every power cord from all your broken
> appliances.

> ... you look forward to Christmas so you can put the kids'
> toys together.

> ... your wife hasn't the foggiest idea of what you do at work.

> ... you've already calculated how much you make per second.
> ... you've tried to repair a \$5 radio.
Not too funny!!! I have deleted the one's that do not pertain.
I think I may be in trouble??????

--

72's & 73's
Rich Wilkerson, Santee, Ca
WD6FDD

Date: Wed, 22 Sep 1999 21:59:47 MST
From: "Chuck Adams, K7Q0" <k7qo@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [51062] OT: K7Q0 has landed in AZ
Message-ID: <19990923045947.61101.qmail@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Gang,

Well it's history now, but I made the drive from TX to AZ and ended up in the right place. It was about 30 mins into the trip with road construction that almost ended my entire career. Thank goodness I was an experienced driver for North American Van Lines in my undergraduate days or I would not be here typing this message. You'll have to ask me in person about that one.... It really scared Phyllis as she was following at the time. Kept her awake the whole trip.

TX went 56 days without rain and the morning I get the truck it rained. Go figure.

Anyway, tornado #15 or #16 for me in Amarillo on the first day of the trip. Rest of trip was fairly uneventful.

Got the rental place and have a 50 meter end fed long wire up and running fairly well. Those spools of wire from NY (the teflon coated stuff) really work well for random wire antennas.

Using only the DSW-20/30/40s right now at just under 1 W on the OHR WM-2 wattmeter. Using a gel-cell at 12.3V. Here is the setup for those interested.

DSW-XX -> WM-2 -> MFJ-941B tuner -> 50 meter long wire up 8 meters pointed North. No feedline, just straight out of the back with

no balun and another 50 m of wire as a counterpoise. You don't expect decomposed granite to conduct do you????? Paddle is a Hensley and I'll attempt to get a review and pics on the web page.

<http://www.qsl.net/k7qo>

The antenna gets 1:1 matching on 80/40/30/20 and no match at all on 17 meters, so going to work that out by next week so I can get up to the higher freqs. So listen for the weak one. Starting from scratch.

View from shack overlooking valley and hills. Not like the flatlands of TX... and the tmp is nice. Just gotta love the mtns.

First Q was on 30m with Steve in Ft Worth TX. Go figure.

Worked over several dozen Qs so far and about 7 states. 90% of the Qs are 2xQRP!!! So look for me at all hours. I found that being off of QRP-L does have its advantages and it runs without me now fairly well.... So you won't be seeing the daily postings from the new QTH as I get ready for the big move.

I filed with the FCC before leaving on the new address, but the ULS system hasn't gotten me anything back. The 610 came back as they forget to mention that you need your TIN/SS# in upper right hand corner.... Also they say don't do both.

Address for QSLs is

Chuck Adams, K7Q0
Box 11840
Prescott, AZ 86304-1840

I'm still filling out K5F0 QSLs and have plenty of cards left. :-)

I want to give a big hand of appreciation to W4MPY QSLs for the new K7Q0 cards that were in the mailbox when I got here. They do a great job and for \$39.95 for 1,000 cards that should do me until the end of the year.

Also got some DX cards forwarded for K5F0. Highlight being ZL2AGY on 30m with 0.95W!! So everyone make sure you keep an envelope on file with the ARRL incoming QSL bureau. See the web page for info <http://www.arrl.org/> Those groups of volunteers do a great job and you may never know when some DX station that you worked needs your card for some esoteric award somewhere. Or

they enjoyed your company and QSO....

OK, I gotta get the workbench setup to build some stuff for Pacificon. See you boys and girls there. It outta be fun. And the AZ group first Saturday at Luby's. Let me know the time and I'll be there.

FYI es tn timer to all for the support on the move

Chuck Adams K7QO CP-60 k7qo@hotmail.com <http://www.qsl.net/k7qo>

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Wed, 22 Sep 1999 23:01:44 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: CQCList@cqc.org, qrp-l@lehigh.edu
Subject: [51063] CQC Meeting Pictures
Message-ID: <199909230500.XAA01001@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Pictures from the September meeting of the Colorado QRP Club are available on the club web site at <http://www.cqc.org/gallery/mtg999/>

73
Marshall Emm
N1FN/VK5FN
n1fn@MorseX.com
Morse Express and Oak Hills Research
"Everything for the Morse Enthusiast"
<http://www.MorseX.com>
<http://www.ohr.com>
(303)752-3382

--

Date: Wed, 22 Sep 1999 23:57:12 -0500
From: "Steve Yates, AA5TB" <aa5tb@swbell.net>
To: QRP-L Distribute <qrp-l@Lehigh.EDU>
Subject: [51064] You Just Never Can Tell...

Message-ID: <000901bf0580\$19c8b540\$b737a497@aa5tb>

MIME-version: 1.0

Content-type: text/plain; charset="iso-8859-1"

Content-transfer-encoding: 7bit

I was tuning the 20m band tonight around 0400 UTC (23 SEP) and heard absolutely nothing. The band sounded deader than a door nail (which wasn't normal as of late). I had just finished rearranging the station a bit and thought I'd work out the cob webs in my J-38 (usually use the Bencher). So I called CQ on my MFJ rig and had ZL1MH in Waima, New Zealand come back (0416 UTC) to me and we had a nice QSO. You just never can tell where the path may be.

This is a regular occurrence on 10m but I found it to be a little unusual for 20m. I just want to encourage others not to give up on a band when it sounds dead and all you've got is a QRP rig.

FYI: Solar Terrestrial Indices were poor. Boulder K index was 5, A index was 29, solar flux was at 140, and the geomagnetic field was at minor storm levels

73,

Steve Yates - AA5TB

Fort Worth, TX - EM12gs

<http://home.swbell.net/aa5tb>

Date: Thu, 23 Sep 1999 04:55:15 -0500

From: "Lynn Simons" <lynnsimons@mindspring.com>

To: <qrp-1@Lehigh.EDU>

Subject: [51065] Cleaning out the shack

Message-ID: <017a01bf05a9\$bcb42e00\$a930c0d1@lynn-s-computer>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi all,

I am in the process of cleaning out the shack and have several items for sell:

Heath HW-8 with matching power supply

Heath HW-9 with the WARC bands

Heath QRP antenna tuner HFT-9-B

Heath QRP wattmeter HM 9

QRP Plus

Two 38 Specials: one built and working and one unbuilt

MFJ 20 Meter QRP transceiver with the keyer and audio filter

SW 40 that was built during the Elmer lessons

Please e-mail me if interested in any of the above

72,

Lynn, KJ3V
Birmingham, AL

Date: Thu, 23 Sep 1999 01:23:52 -0400
From: Dan Puckett <dpuckett@erinet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [51066] What does it take to get to Hell?
Message-ID: <37E9B968.9D03AD12@erinet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

While everyone else was QRPing to the Field on Saturday, I was working communications at the Third Annual Air Force Marathon at Wright-Patterson AFB, just outside of Dayton. If you've done these things, you know there is a lot of boredom punctuated by the odd bits of excitement. So, to fill in the gaps, I brought a couple of radios (NE 40-40, White Mountain-20 and a HTX-100). I was stationed, along with my friend, Charlie (KA80QF) on a hill with lots of wonderful trees. Up went the 40 and 20 meter dipoles. Charlie wanted to run 40 so he could keep a sked.

Charlie had never run QRP before. Poor sucker. Never had a chance. He's hooked now.

Oh yeah, about the title. Charlie's sked was with some buddies of his operating from Hell, MI. So, the answer to the age old question, "What does it take to get to Hell?". About a watt on 40.

Have fun everyone,

Dan WD8AAU, Bash bits

Date: Wed, 22 Sep 1999 07:35:29 -0000
From: "David Benson" <nn1g@earthlink.net>
To: <qrp-1@lehigh.edu>
Subject: [51067] QRP Afield Report- W1FMR
Message-ID: <00d701bf04d8\$da966680\$6196173f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

(gang- Jim asked me to forward this to the reflector. Comments go directly to him- address below)

W1FMR/1 QRP AFIELD on 4 Tree Island (NH / ME border) 9/18/99.

The weather was idyllic, as well as the scenery and the company. The site was on the NH side of a small NH/ME island on the Pisquatqua, an Atlantic tidal river. My girlfriend Margaret helped with the antennas and fed me juices and pumpkin jelly crackers during that long operating ordeal. (Will the veterans please tell me if it is like this after marriage?)

22 contacts were made with an NC-40 rig and a nice Gusher dipole provided by Joe NC2X, and 33 contacts with a GM-20 rig and a clever St. Louis Vertical (Thanks to W6MMA who donated it as a major QRP Hamfest prize). It is wonderful to use HB equipment that performs well, designed by talented people that I know and love

The dipole was hung as a 40M-sloper from a 45-ft. tree and it greatly favored stations to the south as far as Florida.

The SLV was mounted next to my operating chair and it was a real surprise, performing much better than expected. Four 17 foot wires, and one Toyota Camry were used as radials. After tying the Camry into the radial system, my mileage improved greatly and I was able to work coast to coast, with N6MM in CA. (The salesman said I would get a lot of miles with a Camry, and he was right)... I wonder how far I could get with a Mercedes radial ?

It was fun to contact Dave, NN1G the designer of the GM-20, and Dave, NF0R, the original designer of the SLV.

Congratulations to:

50 MILLIWATT STATION - N3XRV in MD on 40M

500 MW stations AA8PJ - OH, N1EI - CT, W4EEX - KY, and

750 MW station K5KW - OK.

Thanks to K7IFZ - ND, and WA0ZPT - SD for the rare ones.

All in all, a superb contest. I wish there were more QRP Afield events. They provide an excellent test of HB gear (and potential mates).

72 Jim Fitton W1FMR/1 jfitton@lucent.com

Date: Wed, 22 Sep 1999 23:13:00 -0700 (PDT)
From: Duane Alles <w9zm@yahoo.com>
To: qrp-1@Lehigh.EDU
Subject: [51068] WTB Autek QF-1A
Message-ID: <19990923061300.3163.rocketmail@send501.yahoomail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Hello All,

I have a friend that would like to buy an Autek QF-1A.
Please email him direct at mikeronie@earthlink.net.

73,
Duane

Do You Yahoo!?
Bid and sell for free at <http://auctions.yahoo.com>

Date: Wed, 22 Sep 1999 23:23:49 -0700
From: "Dave Fifield" <fifield@pacbell.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [51069] 1:1 SWR
Message-ID: <007f01bf058c\$33b7b120\$0100a8c0@pacbell.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I know the math says that it's not necessary to strive for a 1:1 SWR all the time, but I still do....

Maybe there's a bit of obsessive compulsive in me?

Whatever the math/physics says, my log book is littered with QSO's that I am *convinced* I would never have made had it not been for that last little tweak on the antenna tuner to get it down to 1:1

There are times when I've called and called and called a DX station in a pile-up, getting nowhere with my QRP signal - swamped in the quagmire - then I notice that the old twin-lead fed dipole isn't quite tuned to 1:1 (maybe it's 1.5:1 or so) so I give the tuner a tweak and bingo - I get the DX on the very next call. Has this happened to you? This has happened far too many times to me for it to be coincidence.

The question is, are we missing something here in our understanding of launching of RF into the Earth's fields? I feel we are. The results I have had by getting that match perfect seem to me to suggest that there's another factor here that we don't yet understand. Anyone want to spend some time and do some scientific research on this (as opposed to hearsay and conjecture)?

Your thoughts? (don't bother with negativity or flames, I'm immune to both ;-)

72, Dave Fifield, AD6A

Date: Thu, 23 Sep 1999 04:01:35 -0400 (EDT)
From: Bob Patten <n4bp@bc.seflin.org>
To: jfitton@lucent.com

Cc: Juli Patten <jcpatten@juno.com>, Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [51070] Re: QRP Afield Report- W1FMR

Message-ID: <Pine.3.89.9909230332.A5372-0100000@bc.seflin.org>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; CHARSET=US-ASCII

On Wed, 22 Sep 1999, David Benson wrote:

>

> tidal river. My girlfriend Margaret helped with the antennas and fed me
> juices and pumpkin jelly crackers during that long operating ordeal. (Will
> the veterans please tell me if it is like this after marriage?)

In my case, yes! But, to quote the much over used phrase, "Your mileage
may vary." :-)

73,

Bob Patten, N4BP

(0 0)

Plantation, FL

-----o00o-()-o00-----

E-Mail: n4bp@bc.seflin.org

Web Page: <http://wg104a.wh.uni-stuttgart.de/~n4bp>

Brass Pounder BBS: (954) 472-7715

Date: Thu, 23 Sep 1999 06:33:53 -0400

From: "George Goodroe" <goodroe@worldnet.att.net>

To: <k7gt@arrl.net>

Cc: "Qrp-L@Lehigh.Edu (E-mail)" <qrp-1@Lehigh.EDU>

Subject: [51071] RE: Bencher paddles Allen wrenches

Message-ID: <000201bf05b0\$1defc8e0\$7a3dfea9@ggoodroe>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi Allen,

I called Bencher to order the parts (wrench and clip to hold it).....and
Bencher sent the parts free!

A great company IMHO!

73 de KF4CPJ

George Goodroe, QRP-L #1943

St. Petersburg, Florida USA
80 Meter high noise capital of the USA <grin>
<http://home.att.net/~goodroe>
<http://www.qsl.net/kf4cpj>

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Allan G Taylor
Sent: Wednesday, September 22, 1999 12:56 PM
To: Low Power Amateur Radio Discussion
Subject: Bencher paddles Allen wrenches

I keep buying Bencher paddles used that come without the two Allen wrenches. Does anyone know the sizes of the two so that I can get a pair at the local hardware store?

My BY-1 keys my NC40A... ORP related!

GT

```

|
/|
/ |
| /Z |\
/| /599| \

Allan Taylor K7GT
k7gt@arrl.net
Pleasanton CA CM97aq /_|/_/_|_/_\ http://www.qsl.net/k7gt
...QRO, QRP, or barefoot..... [\-----/

```

Date: Thu, 23 Sep 1999 06:55:07 -0500 (CDT)
From: "Adam B. Kanis" <akanis@divis17.ped-gen.uiowa.edu>
To: qrp-l@lehigh.edu
Cc: dave_pomeroy@yahoo.com
Subject: [51072] Clibration source for DMM's (was: open circuit battery voltage)
Message-ID: <Pine.LNX.4.04.9909230641160.18715-100000@divis17.ped-gen.uiowa.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Dave,

I had written a small article for the newsletter of the Iowa QRP Club about making an inexpensive yet decent voltage reference for calibrating voltmeters. It won't compete with NIST, but it'll do a good job. After

seeing your message, i've posted it on my webpages:

<http://genome33.ped-gen.uiowa.edu/hamradio/VoltmeterCal.html>

If you don't have web access, let me know and i'll send a copy of the Microsoft word formatted file to you - or i can convert it to some other format. I just don't have ASCII schematics though.

72,
--adam

Adam B. Kanis, AK0P
adam-kanis@uiowa.edu QTH: Wellman, IA (Near Iowa City) EN41ck
--- ARRL:RSGB:QRP-ARCI:GQRP:QRP-L:NorCal:Iowa QRP:SEITS ---
** On the web at <http://genome33.ped-gen.uiowa.edu/hamradio> **

Date: Thu, 23 Sep 1999 08:08:52 -0400
From: "Richard E. Robinson" <rerobins@email.uncc.edu>
To: qrp-l@lehigh.edu
Subject: [51073] Re: getting broken slugs out of coils -- how??
Message-ID: <v03102801b40fc8291895@[152.15.144.71]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Dave, K8TRF, writes;

>Seeing the recent thread on the low power HW8 reminded me of an age-old
>problem I've had with my HW8. One of the cores cracked and I can't get the
>thing out. It won't turn because the core expands and lets the hex driver
>spin around inside. It won't push out because of the threads. Somewhere I
>once read of a slick way to remove them without destroying the coil form or
>the rig, but I'm over 50 and can't even remember what I had for breakfast
>today mcuh less that trick. Any ideas?

Dave,

I've had the same problem with my HW-9. I had to take the transformer out and go through the bottom to get the cores out. If the HW-8 cores are like the ones in the '9, they have slots in both ends and you can screw them out the top.

The builder of the HW-9 I now have messed up the slots so I took the cans out, unscrewed the cores and turned them around. Now I have pristine slots to adjust.

Good luck, and I hope this helps.

72,

Rick kf4ar

Date: Thu, 23 Sep 1999 06:50:43 -0600
From: Bruce Kizerian <kizerian@ced.utah.edu>
To: lprzycki@erols.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51074] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <37EA2222.54271077@ced.utah.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Larry Przyborowski wrote:

> > I started throwing together a 2N2/40 today,
> > and I have a couple of questions concerning
> > the possibility of stray capacitance from the
> > use of a double-sided pc board and Manhattan
> > construction pads.
>
> No need to worry about this when using "manhattan" construction. The stray
> capacitance won't enter into the picture since all your connection pads are
> above a continuous ground plane, and there are no "circuit foils" to speak
> of.

Manhattan style construction on a double-sided board resulted in a very stable
ElmeRadio AM regen. It has taken considerable effort to duplicate this
performance on a PCB. I finally had to add a full groundplane to the "unused"
side of the board, and, even then, some extra effort to stabilize the AF

amplifier was necessary. Just thought you would like to know of my experience with this building technique.

Bruce kk7zz

Date: Thu, 23 Sep 1999 08:51:19 +0000
From: Michael Neverdosky <mneverdosky@earthlink.net>
To: qrp-l mailing list <qrp-l@Lehigh.edu>
Subject: [51075] Re: Purely Amazing - what can be done with rotten set ups
Message-ID: <37E9DBF7.19D57AA6@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

My best one of these was back in my Navy days. I ordered a replacement meter 'card' for an HF transmitter multiplexor (9 transmitters to one antenna, GREAT tuner). Many weeks later a complete multiplexor arrived on the pier, right at knock off time.

I had the duty that night and did some checking, you know, that new unit had some bad cards in it and my unit was now working. :-))

Any people wonder why so much money is wasted in the military.
Waste is built into the system. :-(

Mike Yetsko wrote:

> Well, another guy
> was supposed to 'check over' orders, and he just felt that the RS
> meters I wanted were junk, and changed the order to a top-line
> Fluke. Well, I hit the roof over that. (Previously I had an order for
> 2 LOW END SCOPES get changed to a \$9000 digital storage
> scope, and I took the heat for that. The digital scope is used, but
> not NEAR as productively as the two 20MHz scopes could have
> been!)

>

> People get hung up on perfect SWR. Why? It's not SWR that matters,
> other than being 'acceptable', but radiated power.

Sometimes a poorer SWR will result in a better radiated power.
Example is a ground mounted quarter wave vertical. A poor ground may allow you to get a 1.1:1 match but improving the ground causes the SWR to rise. Of course, less signal dissipated in the ground also makes more signal out.

> People won't put up a less than perfect antenna. Geesh, run a match

> box to the gutter! JUST DO IT!

It is always worthwhile to improve antenna systems but ANY antenna is better than none.

michael N6CHV

Date: Thu, 23 Sep 1999 08:34:16 -0500
From: "Brad Bradfield, PE" <b_bradfield@yahoo.com>
To: dodgeboy@mindspring.com, qrp-1@lehigh.edu
Subject: [51076] Re: getting broken slugs out of coils -- how??
Message-ID: <37EA2C56.D57F9FC8@yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hey! The rest of us guys over 50 resent that remark. By the way, you want to borrow my tri-focals. Great for the memory. I think. But I don't remember where I put them.

Oh, well.

Brad, W5CGH

Date: Thu, 23 Sep 1999 08:15:31 -0500
From: Karl.Kanalz@optelinc.com
To: n4so@juno.com
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51077] Re: Resistor Lead Forming Tool
Message-ID: <862567F5.00496293.00@hdqsmtp01.optelinc.com>
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

Personally, I use my small needle-nose pliers for "resistor lead bending" as well as for "capacitor lead bending" (as applicable).

It really doesn't take "practice" to get it right!

Karl K - W8TIF
McKinney, Texas

charles k brown <n4so@juno.com> on 09/22/99 04:11:14 PM

Please respond to n4so@juno.com

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
cc: (bcc: Karl Kanalz/hdq/Optel)

Subject: Resistor Lead Forming Tool

Jameco part No. 106884 or 133938
page 102 in the last catalog//@ \$2.95//\$3.25
Bends leads of resistors or capacitors precisely
Jameco Electronic Components
1 800 831-4242
Cus. Service 1 800-536-4316
info@jameco.com
<http://www.jameco.com>

Ken Brown N4S0
Mobile, AL/EM50tk
NorCal-20/5 watts/4 ele. beam

Get the Internet just the way you want it.
Free software, free e-mail, and free Internet access for a month!
Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

Date: Thu, 23 Sep 1999 09:14:53 -0400
From: "Edward A Kwik jr" <eakwikjr@hti.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [51078] Re: What does it take to get to Hell?
Message-ID: <37EA27CC.BE90C07@hti.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dan,

Who are you trying to kid? Been running since 1976 and I know that watching the participants running can make the hours go by real fast. Specially the ones of the fairer sex ;o). BTW ran in a five person team in the 100 KM Dances with Dirt trail relay in Hell, MI two weeks ago. Finished 62 outa bout 100 in just over 9 hours. I (the old guy) had the toughest legs. BTW will be working at the start/finish line at the Detroit marathon next month.

Ed AB8DF

Dan Puckett wrote:

>

> While everyone else was QRPing to the Field on Saturday, I was
> working communications at the Third Annual Air Force Marathon
> at Wright-Patterson AFB, just outside of Dayton.
> If you've done these things, you know there is a lot of boredom
snip...

Date: Thu, 23 Sep 1999 08:20:57 -0500
From: Tim Ahrens <tahrens@hilconet.com>
To: n4bp@bc.seflin.org
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [51079] Re: QRP Afield Report- W1FMR
Message-ID: <37EA2939.BD0C1C85@hilconet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hey Bob - haven't you gotten tired of the pumpkin jelly crackers yet?
hehe

cu

Tim W5FN

Bob Patten wrote:

>
> On Wed, 22 Sep 1999, David Benson wrote:
> >
> > tidal river. My girlfriend Margaret helped with the antennas and fed me
> > juices and pumpkin jelly crackers during that long operating ordeal. (Will
> > the veterans please tell me if it is like this after marriage?)
> In my case, yes! But, to quote the much over used phrase, "Your mileage
> may vary." :-)
>
> 73,
>
> , ' ' ' ,
> (0 0) Plantation, FL
> -----o00o-()-o00-----
>
> E-Mail: n4bp@bc.seflin.org
> Web Page: <http://wg104a.wh.uni-stuttgart.de/~n4bp>
> Brass Pounder BBS: (954) 472-7715

Date: Thu, 23 Sep 1999 09:17:19 -0000
From: "David Benson" <nn1g@earthlink.net>
To: <cornea@vsta.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51080] Re: DSW 40 up and running
Message-ID: <001201bf05a6\$f280caa0\$5691173f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

good morning, Bob -

My apologies for the delay in responding- the recent 'QRP Afield' followup has kept me quite busy.

Although I haven't seen the feedback problem evidenced with the DSW-series, it would seem a good first step to get the board into an enclosure. Once you've installed it, please take care that the harnesses are trimmed to length. No need to take every last millimeter of length out, but it's a good idea to ensure that excess loops of wire aren't pressed down into the components in close proximity. I've traced a few strange effects to excess wire length/ placement and they're usually easily remedied by simply relocating the offending wire.

One other syndrome worth noting- with nearly any rig, high SWR may cause some strange effects. The culprit is stray RF current, as your rig/feedline

and even headphone and power leads become part of your antenna system!
Those of us who've attempted to 'make do' in the field on 80M have seen this syndrome!

You're correct- there's no drive adjustment on the DSW series- I ran out of room! Your reading of 1.25 watts output seems a bit low- it sounds like the PA gain is on the low end of the distribution- without specific voltage readings it's tough to troubleshoot from afar. As an expedient fix, I can suggest paralleling the existing R20 (51 ohms) with a value in the range of 100 to 220 ohms. This increases the voltage gain in the predriver (Q5) stage. Let me know if that doesn't do the trick and we'll replace the PA device.

73- Dave

-----Original Message-----

From: Addi Pittman <cornea@vsta.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: Thursday, September 23, 1999 2:40 AM
Subject: DSW 40 up and running

>>.....First when keying I get an rf
>feedback sound in the audio. It is very soud and makes keying difficult.
>I do not have this rig in an enclosure. It it put together with clip
>leads and laying on a desk.

Next the output is 1.25 watts
>measured on the wm2 transmitting into a dummy load. Is there a way to
>peak this power out?

Date: Thu, 23 Sep 1999 06:36:53 -0700
From: Phil Wheeler <w7ox@mindspring.com>
To: fifield@pacbell.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [51081] Re: 1:1 SWR
Message-ID: <37EA2CF5.199F53CF@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave Fifield wrote:

>

> I know the math says that it's not necessary to strive
> for a 1:1 SWR all the time, but I still do....
>
> Maybe there's a bit of obsessive compulsive in me?
>

Hmmm, could be.

> Whatever the math/physics says, my log book is
> littered with QSO's that I am *convinced* I would
> never have made had it not been for that last little
> tweak on the antenna tuner to get it down to 1:1
>
> There are times when I've called and called and
> called a DX station in a pile-up, getting nowhere
> with my QRP signal - swamped in the quagmire -
> then I notice that the old twin-lead fed dipole isn't
> quite tuned to 1:1 (maybe it's 1.5:1 or so) so I give
> the tuner a tweak and bingo - I get the DX on the
> very next call. Has this happened to you? This has
> happened far too many times to me for it to be
> coincidence.
>

Might be psychological: "The little train who knew he could" sorta thing!

Or maybe you have a really pathological antenna system :-)

> The question is, are we missing something here
> in our understanding of launching of RF into the
> Earth's fields? I feel we are. The results I have
> had by getting that match perfect seem to me to
> suggest that there's another factor here that we
> don't yet understand. Anyone want to spend
> some time and do some scientific research on
> this (as opposed to hearsay and conjecture)?
>

I suspect the theory is pretty well established and accurate.

I have counter examples where I've broken thru pileups with a 2:1 match, Dave .. but didn't realize it until after the fact; so ...

> Your thoughts? (don't bother with negativity or
> flames, I'm immune to both ;-)
>

Not taken to be a "flame", I hope; I'm getting sensitized to what I say here!

72, Phil W7OX

Date: Thu, 23 Sep 1999 09:47:05 EDT
From: ARDUJENSKI@aol.com
To: qrp-l@lehigh.edu
Subject: [51082] DCTL ANTENNA
Message-ID: <6233626d.251b8959@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

One of the feedback comments regarding RESTRICTED ANTENNAS was the DCTL or Distributed Capacitance Twisted Loop. You can see the details at <http://home.earthlink.net/%7Emwattcpa/antennas.html>. It really sounds fascinating.

I plan to try 40M and 80M this weekend and will pass on the results after a week of testing. I would like any feedback from those of you that have used one.
Alan KB7MBI

Date: Thu, 23 Sep 1999 09:49:48 EDT
From: WB9MII@aol.com
To: qrp-l@lehigh.edu
Subject: [51083] Has anyone tried 2 pieces of coax as balanced feeder ?
Message-ID: <ee4413d4.251b89fc@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hello,
A friend told me he'd tried using 2 equal pieces of coax (soldered the outer braid together) as a balanced feeder.....sorta like shielded twinlead. Has anyone on qrp-l ever tried that and did it work ?
Thanks 72/73
Greg WB9MII
QRP ARCI 9719

Date: Thu, 23 Sep 1999 07:13:42 -0700
From: Russ Dow <n7dw@garlic.com>
To: Karl.Kanalz@optelinc.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51084] Re: Resistor Lead Forming Tool
Message-ID: <37EA3596.458AD65E@garlic.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I use my fingers. Cheapest tool around, and always at hand. <cringe>

73, Russ N7DW

Karl.Kanalz@optelinc.com wrote:

> Personally, I use my small needle-nose pliers for
> "resistor lead bending" as well as for "capacitor lead bending"
> (as applicable).
>

Date: Thu, 23 Sep 1999 10:19:55 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <WB9MII@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [51085] Re: Has anyone tried 2 pieces of coax as balanced feeder ?
Message-ID: <001901bf05ce\$ba908ae0\$9001a8c0@wn.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> Hello,
> A friend told me he'd tried using 2 equal pieces of coax (soldered the
outer
> braid together) as a balanced feeder.....sorta like shielded twinlead.
Has
> anyone on qrp-l ever tried that and did it work ?
> Thanks 72/73
> Greg WB9MII

I recall seeing an article about this very thing. I believe it was in
one of

the old ARRL handbooks, I have a few, from the late 50's and 60's, so maybe it was in there.

I seem to recall this was used to get signals through metal siding or where the signal had to be routed through long conduit runs. Then again, I may be blowing smoke. But I DID see the article, even if I don't have any recall of what was in it.

Mike
N1DVJ

Date: Thu, 23 Sep 1999 08:21:48 -0600
From: Jeff Francis <jfrancis@frii.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51086] Re: QRP Afield Report- W1FMR
Message-ID: <19990923082148.A11182@geek.noducks.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii

On Wed, Sep 22, 1999 at 07:35:29AM -0000, W1FMR wrote:

> The weather was idyllic, as well as the scenery and the company. The
> site was on the NH side of a small NH/ME island on the Pisquatqua,
> an Atlantic tidal river. My girlfriend Margaret helped with the
> antennas and fed me juices and pumpkin jelly crackers during that
> long operating ordeal. (Will the veterans please tell me if it is
> like this after marriage?)

Someone much wiser than me once said:

"The problem with marriage is that women expect men to change, but they don't. Men expect women to stay the same, but they don't."

--
+-----+-----+-----+
Jeff Francis - KCOBWS		Ack!			
Level Three Communications		____/			
Denver, CO USA DM79nr		\ o.0			
			You cannot strengthen the		=(_) =
			weak by weakening the		U
39d43m16.4s N 104d52m10.7s W		strong.			
jfrancis@frii.com jeff@l3.net		--Unknown			
http://www.frii.com/~jfrancis		PRR...			
+-----+-----+-----+

Date: Thu, 23 Sep 1999 10:25:25 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <n7dw@garlic.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51087] Re: Resistor Lead Forming Tool
Message-ID: <002901bf05cf\$883977e0\$9001a8c0@wn.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> I use my fingers. Cheapest tool around, and always at hand. <cringe>
>
> 73, Russ N7DW
>
> Karl.Kanalz@optelinc.com wrote:
>
> > Personally, I use my small needle-nose pliers for
> > "resistor lead bending" as well as for "capacitor lead bending"
> > (as applicable).

To those that haven't seen or used one of these jigs, you just can't appreciate how desirable they are. They come with a channel down the middle of the triangle and you can buy them for different size components or even wattage resistors, but there's really nothing to prevent you from laying a 1/4w resistor on the 1/2w jig.

The biggest thing is they are quick. Lay the part on, bend over the leads. Sounds so simple. But the part now 'drops in' to the board perfectly with cleanly formed leads. No pulling, no 'humps', just so sweet it makes it a joy to use.

For the \$2 or so they cost, buy a couple, as you'll lose one or two, probably 'borrowed' by HAM friends who see it used.

It is definately the "BEST tool for the job!"

Mike Yetsko
N1DVJ

Date: Thu, 23 Sep 1999 10:50:14 EDT
From: Robsparks@aol.com

To: qrp-1@lehigh.edu
Subject: [51088] AR QRP 40m Net Results
Message-ID: <4505a8f3.251b9826@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

The AR-QRP Net 7 QNIs last night. The net freq of 7.042 was busy night so we QSYd down to 70417. As it turned out, apparently an op was working half of a split at that freq too, so there ensued a 10 min wait for that QSO to end. Having had an initial start at 0030Z, then net finally resumed at 0040Z. Propagation was fair and signal reports were 559's or better. Check-in went smoothly and quickly, thanks to everyone's flexibility with the "single letter/full call" technique. We are learning, and it is fun! The net ended at 0105 with the onset of SSB QRM. Doc K0EVZ was able to slip in the last QNI - thanks for the QSY waaay up, Doc! The net is a fun place to just listen and brush up on CW, even if one does not choose to QNI! Thanks to those who participated! Here are the stations that checked in:

N0WM Wm Lost him!
N5IB Jim
KJ5TF Jim Great new web page Jim!
AF4PS Mac New Call - and stealth QRP: Attic Dipole!
AB5WX Dave
KA9TXE Lost him!
K0EVZ Doc

The NCS was Bob AB5ZD, using the AR QRP Club call NQ5RP, QTH Alexandria LA, running 5 watts to a G5RV up about 25 feet in pecan trees. Orientation of the ant wire is NNW to SSE. Following is a list of Arkansas QRP Club nets:

Monday Night	0030Z	3.560 MHz
Wednesday Night	0030Z	7.042 MHz

Non-members are welcome (and encouraged) to QNI!

72,

Bob AB5ZD

Date: Thu, 23 Sep 1999 10:57:48 -0400
From: "ai2q" <ai2q@ispchannel.com>
To: <K2UD@aol.com>, "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [51089] RE: 2N2/40 VFO and Stray Capacitance
Message-ID: <000101bf05d4\$00bf35c0\$5c32a7d0@ai2q.ispchannel.com>
MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The VFO, and all other circuits, in my Manhattan-style 2N2/40 rig work really well. The VFO shows no discernable drift. It's as stable as my Omni-V. FYI, for what it's worth.

Vy 73, AI2Q, Alex in Kennebunk, Maine .-.-.

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Randy Jouett
Sent: Wednesday, September 22, 1999 7:10 PM
To: Low Power Amateur Radio Discussion
Subject: 2N2/40 VFO and Stray Capacitance

Hi, Gang, and fellow 2N2/40 builders.

I started throwing together a 2N2/40 today, and I have a couple of questions concerning the possibility of stray capacitance from the use of a double-sided pc board and Manhattan construction pads. Don't know if I should be worrying about this, but I tend to be a perfectionist when it comes to construction :^).

Anywho, I'm getting ready to build the VFO and decided to get out the bible -- Solid State Design, of course! -- and read up on VFO construction. While reading, I came up upon this little tidbit on page 33, last paragraph:

"Double-sided pc boards are not recommended in VFOs...at least not in the frequency-determining part of the circuit. The pc board, if double-sided, provides numerous unwanted capacitance wherever the circuit foils are formed. The dielectric material of the pc board (phenolic or glass epoxy) is not especially stable with regard to changes in temperature and humidity, and drift can result from the double-sided board approach."

With all this in mind, I was wondering if it would be worth the time and trouble of removing the bottom

layer of copper on my double-sided board under the VFO? Also, has anyone determined the capacitance of an average-sized manhattan pad and calculated its stray-capacitance effects in critical areas of the circuit? Should I even use manhattan construction techniques in the VFO or other oscillators and just put those sections together using ugly construction? Am I being too damn picky again as usual? :^)

I was thinking about using not worrying about this just yet, building the rig, and then take an Xacto knife to the underside of the VFO foil, cutting away small strips under the frequency-determining sections of the VFO, and then looking to see if I notice any frequency-stability improvement. Since I'm a few weeks from completion, I was wondering if anyone out there was willing to do this test and see what gives? If not, I'll let "y'all/you guys/you'uns -- that should cover most of the country! :^) -- know what's what when I have the thing on the air and try it myself :^).

Anywho, any help or advice would be appreciated!

72/73,

Randy Jouett, AB5NI

.

Date: Thu, 23 Sep 1999 10:11:45 -0500
From: Jeff Logullo <logullo@mindspring.com>
To: qrp-l@lehigh.edu
Subject: [51090] Re: Electronics of Radio, by Rutledge: seen it yet?
Message-ID: <37EA42D4.7818FE61@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Several have asked about the price of this book, and which book club I was referring to.

The Library of Science <<http://los.booksonline.com/los>> shows the publisher's price of \$44.95. The "member's price" is \$33.95, and since I have one more book to buy to fulfill my obligations... I think I may pick it up. By the way, if I had enough "bonus points" I could also get

this book for \$22.47.

Date: Thu, 23 Sep 1999 07:13:58 -0800
From: ppdlg <ppdlg@gci.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [51091] Report from Newbie with a PIXIE
Message-ID: <37EA43B6.4CA3D6EE@gci.net>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii

Thanks for all the replies with helpful advice. You guys are great.

I asked about a short range antenna for a pixie, and a common suggestion was just to use a 1 watt 50 ohm resistor dummy load. I tried it, and it works great! Tx and Rx. What a swell feeling when your home made rig comes alive.

Next step is to build a second pixie (with a cap in line with the xtl for offset) for pixie to pixie communications.

Thanks again,

Patrick, AL0Q

Date: Thu, 23 Sep 1999 15:48:18 +0100
From: "Steve Sorrell" <ap036@detroit.freenet.org>
To: <myetsko@insydesw.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [51092] Re: Resistor Lead Forming Tool
Message-ID: <010701bf05d2\$ae0caac0\$e642b3c7@sorrells>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

My sentiments exactly, Mike. I had two of them given to me and a year ago I gave one to a friend. He's all giggle faced now with how easy it is to form leads and drop in components. If I lost mine it would totally stomp on my mellow, dude! ;-)
de Steve, W8SFF

Date: Thu, 23 Sep 1999 11:50:08 -0400
From: "Hugo Catta" <h.catta@worldnet.att.net>
To: <WB9MII@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [51093] Re: Has anyone tried 2 pieces of coax as balanced feeder ?
Message-ID: <001001bf05db\$510ac420\$86dc4e0c@compaq>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----

From: <WB9MII@aol.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Thursday, September 23, 1999 9:49 AM
Subject: Has anyone tried 2 pieces of coax as balanced feeder ?

> Hello,
> A friend told me he'd tried using 2 equal pieces of coax (soldered the
outer
> braid together) as a balanced feeder.....sorta like shielded twinlead.
Has
> anyone on qrp-l ever tried that and did it work ?
> Thanks 72/73
> Greg WB9MII
> QRP ARCI 9719
>

Depending on what you mean by "It works".
It keeps the balance allright; but still has the loss of two pieces of coax
when the SWR is high, opposed to open or ladder line in which losses are
still low when SWR is way up. All relative.

72,
Hugo
CX9AAK/W2

Date: Thu, 23 Sep 1999 12:01:19 -0400 (EDT)
From: Bob Patten <n4bp@bc.seflin.org>
To: Tim Ahrens <tahrens@hilconet.com>

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51094] Re: QRP Afield Report- W1FMR
Message-ID: <Pine.3.89.9909231139.A15436-01000000@bc.seflin.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 23 Sep 1999, Tim Ahrens wrote:

>
> Hey Bob - haven't you gotten tired of the pumpkin jelly crackers yet?
>
Never tried 'em, sounds disgusting! My XYL feeds me burritos, Wendy's
chicken sandwiches, and yogurt. Now doesn't that sound much better? :-)
There have been repeated threads on the CQ-Contest reflector regarding
what is the best thing to eat during a marathon (48 hour) contest. You'd
be amazed at what some of these clowns eat!

73,

Bob Patten, N4BP (0 0) Plantation, FL

-----o00o-()-o00-----

E-Mail: n4bp@bc.seflin.org
Web Page: <http://wg104a.wh.uni-stuttgart.de/~n4bp>
Brass Pounder BBS: (954) 472-7715

Date: Thu, 23 Sep 1999 09:06:09 PDT
From: "Tedd Wong" <wong_te@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [51095] Re: FS: QRP Transceivers
Message-ID: <19990923160610.55268.qmail@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>I have the following items for sale:

- >1. Norcal 38 Special BUILT but untested, with connectors/jacks \$25
- >2. Norcal 38 Special UNBUILT, with instruction manual. \$25
- >3. Machined case for 38 Special. \$25
- >4. Norcal 40A, built and tested, June 1999. \$100
- >5. NC-20, Norcal version with AGC mod and precision ten turn pot.\$120

Date: 23 Sep 1999 12:32:27 -0400
From: Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>
To: qrp-l;
Subject: [51097] Manhattan pad capacitance
Message-ID: <1999Sep23.123227-0400@[130.113.234.7]>

Many have posted that the paddy board capacitance is negligible - just what **IS** the capacitance?

We need to know something about a "paddy" to calculate its capacitance; length, width, thickness, and dielectric constant of glass-epoxy (I recall its about 4.5 times that of air?).

Let's define a "paddy" as being 4mm long and 2mm wide. That's pretty big, so our capacitance may be on the high side. PCB material is usually 1/16" thick (1.58mm).

Capacitance (farads) = $E_0 \cdot k \cdot A / \text{thickness}$
where E_0 is permittivity of free space
and is 8.854×10^{-12}
 k is dielectric constant of glass/epoxy = 4.5?
 A is area in square m.
thickness is also metric.

This works out to be 0.2 picofarads, between top of paddy to the groundplane underneath. This calculation ignores any fringe fields that extend beyond the paddy's edge - a fair assumption. Also ignored is the thin layer of cyano-glue. This would likely decrease capacitance by a tiny amount.

BTW: if you use double-sided PCB with this manhattan construction, you'll end up with TWO groundplanes. Good practice says to connect these together, all around the outside edges.

Date: Thu, 23 Sep 1999 12:44:12 -0400
From: Greg Weinfurtner <weinfurt@oak.cats.ohiou.edu>
To: qrp-l@Lehigh.EDU
Subject: [51098] QRPTTF Log
Message-ID: <v03110702b410072f83fc@[132.235.81.85]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi all.

Here is my log of QRPTTF. I was on 40 cw with 5 watts from my Ten-Tec Scout. Antenna was a 40 meter delta loop, kinda sloped at about 45 deg angle. Didn't have a lot of time to operate, but managed a few on Saturday night! Good contest!

NS80

2026 K2UD
2036 WK8S
2334 WA8RXI
2336 K8CV
2336 W4EEX
2338 WA3PTG
2343 N0MF
2348 AB8DF
2349 K1VP
2351 KV2X
2351 W3BB0
2352 W5JAY
2353 K5KW
2355 NN1G
2356 KB9GHN

Date: Thu, 23 Sep 1999 17:39:08 +0700
From: "Donny" <dsirait@centrin.net.id>
To: <qrp-l@Lehigh.EDU>
Subject: [51099] Re: 1:1 SWR
Message-ID: <199909231716.AAA04527@smtp.centrin.net.id>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

> Maybe there's a bit of obsessive compulsive in me?
>
> Whatever the math/physics says, my log book is
> littered with QSO's that I am *convinced* I would
> never have made had it not been for that last little
> tweak on the antenna tuner to get it down to 1:1

Personally I don't like using tuners since there will be some losses involved (at QRP levels you are likely want to radiate all your RF if possible??) I'm not an expert on physics and or electronics but according to my experience a mismatch between the transceiver impedance and the antenna impedance will produce losses and with the aid of a tuner you'll bridge the difference and makes everybody happy

as long as the antenna is resonant on the operating frequency otherwise the losses will be too much and we are not radiating milliwatts but probably microwatts from the antenna.

Ask the experts what loss a mismatch of SWR 1,5 will do to a 5 watt RF and convert that to db you'll find that it is not too bad at all but when the propagation is not cooperating then you better switch off your radio and watch TV with your family.

72 de Donny YB6LD/1 qrp-1 # 2004

Date: Thu, 23 Sep 1999 13:42:57 -0400
From: "Greg Heath" <gheath1@nycap.rr.com>
To: "QRP-L (SENDING ? TO QRP-L)" <qrp-1@Lehigh.edu>
Subject: [51100] Hf conditions.....?
Message-ID: <06c301bf05eb\$12d70c80\$2c3a5c18@nycap.rr.com>

My antenna was felled by a 60' tree last week , courtesy of Hurricane Floyd. How are the conditions for Qrp lately? I am about to tear my shack apart and go portable. I was flying last night at FL 210 (21,000 feet) over NY , and noticed the Northern lights. I wondered if the storm affected anybody's propagation last night..just curious. I wish the plane had HF. Maybe I could get them to install it for Qrp....(yeah right)! I am trying to set up a email server/reflector for people stuck in apartments and condos that need ideas for antennas. I am planning it to be a site by the people for the people. It is long overdue for us people stuck with "sticky" situations in operating from less than desirable QTH's . I will post the site soon and will update the list here for all those that are interested. Cheers and Beers....."72" Greg KB2QQM

Date: Thu, 23 Sep 1999 10:52:18 -0700 (PDT)
From: Chris Taylor <cht@imipolex-g.com>
To: Greg Heath <gheath1@nycap.rr.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [51101] Re: Hf conditions.....?
Message-ID: <Pine.LNX.4.04.9909231051330.22280-100000@krank.imipolex-g.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 23 Sep 1999, Greg Heath wrote:

> I am trying to set up a email server/reflector for people stuck in
> apartments and condos that need ideas for antennas. I am planning it to be

Great idea for a list!

Chris Taylor

cht@imipolex-g.com
Los Angeles, CA, USA
<http://www.imipolex-g.com/~cht>

KF6NMX

Date: Thu, 23 Sep 1999 14:00:01 -0400
From: "Dieter Gentzow - WB8QYY" <wb8qyy@one.net>
To: <gheath1@nycap.rr.com>, "Low Power Amateur Radio Discussion" <qrp-
l@Lehigh.EDU>
Subject: [51102] Re: Hf conditions.....?
Message-ID: <003501bf05ed\$7594fe70\$6401020a@lsiindustries.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ref propagation...

I've never heard flutter as I did last night on 40 meters.
The flutter had a frequency of about 10 herz; heard it
mainly on 40, less on 30 and 20 meters. Thought something
was wrong with my K2 (spilled beer on it yesterday). I knew
all was alright later in the night when the "flutter" faded away.
I mean it was Rod Serling stuff...

Dieter WB8QYY
Loveland, OH

----- Original Message -----

From: Greg Heath <gheath1@nycap.rr.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Thursday, September 23, 1999 1:42 PM
Subject: Hf conditions.....?

> My antenna was felled by a 60' tree last week , courtesy of Hurricane
Floyd.
> How are the conditions for Qrp lately? I am about to tear my shack apart
> and go portable. I was flying last night at FL 210 (21,000 feet) over NY

,
> and noticed the Northern lights. I wondered if the storm affected
anybody's
> propagation last night..just curious. I wish the plane had HF. Maybe I
> could get them to install it for Qrp....(yeah right)!!
> I am trying to set up a email server/reflector for people stuck in
> apartments and condos that need ideas for antennas. I am planning it to
be
> a site by the people for the people. It is long overdue for us people
stuck
> with "sticky" situations in operating from less than desirable QTH's . I
> will post the site soon and will update the list here for all those that
are
> interested. Cheers and Beers....."72" Greg KB2QQM
>
>
>

Date: Thu, 23 Sep 1999 14:06:52 -0400
From: "Mike Czuhajewski" <wa8mcq@erols.com>
To: <qrp-l@lehigh.edu>
Cc: "wa8mcq" <wa8mcq@erols.com>
Subject: [51103] QRP column on ARRL web site
Message-ID: <199909231757.NAA18405@xanadu.evi-inc.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

And now, even more ARRL support of QRP--a QRP column on their web site!

I don't remember if this has been mentioned on qrp-l--I just glance through the html archives at lunchtime at work and may have missed mention of this--but W6TOY told me to check it out and there it was. In the Members Only section of the ARRL web page (www.arrl.org/members/) is something called "The ARRL Web Extra." Click on that and when it opens, you'll see a box on the right saying "ARRL Web Extra Current Features." At the top of the list (it was the latest item uploaded) is:

QRP with W6TOY: Low-Power Operating

Among other things, he talks a bit about a subject near and dear to his heart, the Tuna Tin 2. When Ed Hare, W1RFI of ARRL, visited MD a couple years back he let Bruce and I hold and caress the original W1FB Tuna Tin 2 which he had saved from oblivion at a hamfest, but you've all heard that story before. After touching the original, Bruce has been possessed ever

since :-)

And on October 30 and 31, W1AW will be holding a special operating event on the air, with the original TT2 on 40M and clones on 20 and 30M. Bruce and I will be among the operating crew. Be sure to give a listen around the standard QRP CW frequencies.

Bruce told me that the column will be done monthly, so if you're an ARRL member be sure to check it out. And if you're an ARRL member, don't forget that you can subscribe to QEX at a discount. The price has risen and it is now 6 issues per year instead of monthly, but....if you haven't seen it in a few years, gads, has it changed! They really put it on steroids a couple years back, and have lots of really good technical articles. It's a big change from a few years ago, and was enough to make me start subscribing again. If you're really into the technical side of QRP, it's well worth checking out.

73 and queue our pea DE WA8MCQ

Date: Thu, 23 Sep 1999 11:21:34 -0700 (PDT)
From: Dave Pomeroy <dave_pomeroy@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51104] Re: Hf conditions.....?
Message-ID: <19990923182134.27673.rocketmail@web601.yahoomail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Being a new operator I never heard the flutter before.
I also thought that my K2 was having a problem. I
feel better now that someone else heard it.
Dave KL0TE/8

--- Dieter Gentzow - WB8QYY <wb8qyy@one.net> wrote:
> Ref propagation...
>
> I've never heard flutter as I did last night on 40
> meters.
> The flutter had a frequency of about 10 herz; heard
> it
> mainly on 40, less on 30 and 20 meters. Thought
> something
> was wrong with my K2 (spilled beer on it yesterday).
> I knew
> all was alright later in the night when the
> "flutter" faded away.
> I mean it was Rod Serling stuff...

>
> Dieter WB8QYY
> Loveland, OH
>
> ----- Original Message -----
> From: Greg Heath <gheath1@nycap.rr.com>
> To: Low Power Amateur Radio Discussion
> <qrp-1@Lehigh.EDU>
> Sent: Thursday, September 23, 1999 1:42 PM
> Subject: Hf conditions.....?
>
>
> > My antenna was felled by a 60' tree last week ,
> courtesy of Hurricane
> Floyd.
> > How are the conditions for Qrp lately? I am about
> to tear my shack apart
> > and go portable. I was flying last night at FL
> 210 (21,000 feet) over NY
> ,
> > and noticed the Northern lights. I wondered if
> the storm affected
> anybody's
> > propagation last night...just curious. I wish the
> plane had HF. Maybe I
> > could get them to install it for Qrp....(yeah
> right)!
> > I am trying to set up a email server/reflector for
> people stuck in
> > apartments and condos that need ideas for
> antennas. I am planning it to
> be
> > a site by the people for the people. It is long
> overdue for us people
> stuck
> > with "sticky" situations in operating from less
> than desirable QTH's . I
> > will post the site soon and will update the list
> here for all those that
> are
> > interested. Cheers and Beers....."72"
> Greg KB2QQM
> >
> >
> >
>
>
>

>

Do You Yahoo!?

Bid and sell for free at <http://auctions.yahoo.com>

Date: Thu, 23 Sep 1999 11:22:41 -0700
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: <qrp-1@lehigh.edu>
Cc: <WA6GER@aol.com>
Subject: [51105] Pacificon 2N2/40 and Regen Receiver Building Contests
Message-ID: <01bf05f0\$a02a9b60\$630a0d0a@doug.dpol.k12.ca.us>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guys, I went to Merced last night and ordered the plaques for the 2N2/40 and Regen Receiver Building Contest to be held this year at Pacificon. NorCal will be awarding 3 plaques in each division, for 1st, 2nd, and 3rd place. The plaques are walnut, and have a custom NorCal logo in Color!! You have to see them, and as soon as I get them will sent a digital picture to Jerry for the NorCal Web Page.

The 2N2/40 contest is for rigs built from the article by Jim Kortge in the Winter 98 issue of QRPp. This rig is made from 2N2222 transistors, and is a marvel in design and functionality. Make sure that you get your's done in time, as the plaques are absolutely beautiful.

Also, we are having a Regen Contest too. Build up one of the designs from summer QRPp or any other regen design, and enter the contest. Competition will be tough, but who knows, you might have the winning touch. You can't win if you don't enter, so get the soldering iron hot.

Also, Jerry Parker is doing the preregistration and will prepare a special Pacificon QRP Badge for you. Send him an email at jparker@fix.net to get on the list. Make sure that you tell him your call and that you would like a badge.

Here is the latest list that Jerry sent me last week. Take a look at the guys on the list, it is going to be another great QRP event, and you want to be there. It is a chance for you to meet and talk with the guys you see on the list, the designers, the vendors, the writers, and the newbies.

1. Jim Cates, WA6GER
2. Doug Hendricks, KI6DS

3. Jerry Parker, WA6OWR
4. Paul Harden, NA5N
5. Mike Gipe, K1MG
6. Dick Pascoe, G0BPS
7. Jim Kortge, K8IQY
8. Jim Duffey, KK6MC
9. Joe Everhart, N2CX
10. Doug Hauff, KE6RIE
11. Mary Cherry, NA6E
12. Norm Melick, KQ6SD
13. Veda Henson, KF6JHC
14. Chuck Adams, K7QO
15. Bill Jones, KD7S
16. Bob Okas, W3CD
17. Russ Dow, N7DW
18. Gody Siason, AC6UV
19. Bob Cortez, KF6CXC
20. Sam Imai, KF6ML
21. Paul Macial, AK1P
22. Jeff Grudin, AC6KW
23. Bob Hightower, KI7MN
24. Bertie Hightower, N7XJW
25. Ron Baldwin, K6EXT
26. Jim Lowman ,AD6CW
27. Judy Ann Lowman, W6YBS
28. Rich Vizcarra, K6TM
29. Mike Wood, K6MW
30. Ron Smith, KE6RS
31. Brian Kassel, W5VBO
32. Dave Fifield, AD6A
33. John Moriarity, K6QQ
34. Jeff Jones, AB6MB
35. Glenn Menard, W6KI
36. Dave Epps, AB5PC
37. Edna Epps, KF6JSL
38. Eric Swartz, WA6HHQ
39. Lerma Swartz, KD6ANH
40. Wayne Burdick, N6KR
41. Scott King, AH6KL
42. Denis Englander, K06GF
43. Matt Clark, KC6VSR
44. Sam Vigil, WA6NGH
45. Monte Waite, WA6JYB
45. Keith Norrell, W5JBT
46. Chuck Boblenz, AD6GI
47. George Heron, N2APB
48. Jeff Davis, N9AVG
49. John Dundas, W6SU

50. Pete Hoover, W6ZH
51. Joel Neal, KC7UBP
52. Dan Watson, AC6PI
53. Betty Soucy, NY6A
54. Courtney L. Flatau, AJ6Z
55. Ward Hill, N1IE
56. Ed Loranger, WE6W
57. Jim Stafford, W4QO
58. Marilyn Stafford, K4ZOL
59. William Phinizy, K6WHP
60. William Chambers, K6BNC
61. Arth Silvers, W6AGS
62. Brian Shiratsuki, N6SXT
63. Bob Tellefsen, N6WG

Others that I know are attending are Jan Medley, N0QT, Jay Bromley, W5JAY, Randy Foltz, A7TQ, and Gary Diana, N2JGU, and Monte Stark.

Speakers include Jim Kortge, Jim Duffey, Joe Everhart, Paul Harden, Mike Gipe and Dick Pascoe. They will all be there Friday evening for the no host dinner at Fuddruckers at 6 PM, and also at the Open House Friday night. The highlight of the Friday night event will be the special Fox Hunt with Mike Gipe as the fox and 50 operators using Tuna Tin 2/MRX transmitter receiver pairs. Still have a couple of kits left if you want to take part. Send me email saying that you will be attending Pacificon and that you will build the kits and bring them to Pacificon. The kits are free from NorCal, all that you have to pay is the \$4 shipping charge. Kits are complete for the receiver including a case, and all that you need for the TT2 is a SPDT toggle switch and an empty tuna can. We even include the 4 - 200 ohm resistors to make a dummy load for an antenna or you can make your own, but it can't be any bigger than 6 foot and it has to be homebrewed (no Hamsticks allowed, unless you build it yourself). But, you can build a loaded 6 foot antenna, or a small loop. The fox hunt will be Friday night at 8:00 in the QRP Hospitality room.

Note that all qrp activities are FREE. No additional charge by NorCal. There is a \$5 preregistration charge for Pacificon, \$8 at the door, but that goes to Pacificon, not NorCal. We don't get any revenue from the Pacificon QRP Forum, actually quite the opposite as we pick up the traveling and lodging expenses of the speakers, provide a compendium of all of the talks, and are giving away 50 Tuna Tin 2/MRX kits for the building/operating event on Friday night. We do this to reinvest the excess NorCal funds in QRP. We want to return the benefits to the members and support and advance QRP.

The events are held at the Sheraton Hotel in Concord, California and will be Oct. 15, 16 & 17. They have special hamfest rates of \$79, (which is a reduced rate not an increase) and the Sheraton is an excellent first class hotel. You will not be disappointed in the rooms and the service.

Saturday will start with the forums at 9, 10, 11, 1, 2, and 3 and then Saturday evening we all meet back at the hospitality room at 7PM for the 2N2/40 building contest and the regen building contest, plus the show and tell of all your projects. We aren't having an open building contest this year, but bring your projects and share them with us, as we always enjoy seeing projects.

Friday and Saturday nights, Paul Harden and Darrel Jones will have test equipment and give a demo on how to use it. It will be very informal, and if you have a rig that you just can't figure out what the problem is, bring it along and let Darrel and Paul have a crack at it.

We will also be doing compendiums this year, and it promises to be another bang up issue with articles by Dick Pascoe (history of QRP), Jim Kortge (his new 2N2/6 Transceiver!!!), Joe Everhart (more quickies), Jim Duffey (a great treatment of antennas), Mike Gipe (how to operate contests and win fox hunts) and Paul Harden, (build a regen and learn electronics at the same time). Plus an article by KI6DS on how to do a simple club project, including all the details on how and where to get parts. Last year we supplied 200 compendiums, this year we will have 300 on hand. They are free to the attendees, and will not be available after the hamfests. To get a compendium, you have to come to Pacificon. We will not be selling these.

Pacificon will have more qrp vendors this year. Red Hot Radio, Elecraft and Wilderness Radio have booths this year in the main exhibit hall. You want to be sure and stop by and sign up for great prizes that they are giving. I'll let them announce the details. Also, Gary Diana will have Embedded Research products, Joe Everhart will have Gusher antennas, Jay Bromley will have Ft. Smith QRP Group VE3DNL Marker Generator kits, and Sam Imai will have Lake Perris Qrp Society Antenna Kits. I also think that Brian Kassel and Bob Hightower will have 2N2/40 board kits available. All of the above will be in the hospitality rooms both nights. Also, NorCal toroid kits will be there too!! Plus, Jerry Parker and his NorCal t shirts.

We are gonna have fun, and hope you can be there with us. 72, Doug, KI6DS

Date: Thu, 23 Sep 1999 14:26:14 -0400
From: The Boices <boice@bigfoot.com>
To: qrp-1@Lehigh.EDU
Subject: [51106] More on ULS
Message-ID: <3.0.6.32.19990923142614.007b89f0@pop.megalink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

An update, via the ARRL:

"In the wake of comments and criticisms about the difficulty of having to configure a dial-up connection with a particular browser (Netscape version 4.5 or higher and version 4.61 preferred) to file an application, the ULS Task Force says it's planning to convert to electronic filing via the Internet. But a spokesperson says that is not likely to happen for another six to nine months. In the meantime, some have opted to file a paper Form 605 instead."

72,

Mike Boice, KW1ND
New Gloucester, Maine FN43uw
QRP-L # 576 ARCI ARS # 188 K2 # 185 NorCal

Date: Thu, 23 Sep 1999 13:39:16 -0500
From: "Randy Jouett" <rules@bellsouth.net>
To: <K2UD@aol.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [51107] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <031a01bf05f3\$1e6ff9f0\$46e498cd@spock>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

-----Original Message-----
From: K2UD@aol.com <K2UD@aol.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Wednesday, September 22, 1999 7:48 PM
Subject: Re: 2N2/40 VFO and Stray Capacitance

Hi Howard,

[snip]
>Even with the wind blowing that same wire around, the VFO
>just won't move!

To quote Beavis and Butthead, "Cool!" :^).

>Incidentally, I used single-sided for the pads in both of the 2N2s I
>built. They work identically, show the same level of stability.

Hmmm. I'm using double-sided for the pads, and I'm starting
to wonder if this is a mistake? Working on the TR section, so
I can correct this problem pretty easily if I have to.

>Don't spend any time worrying about using double-sided board for the rig,
>even in the VFO area. It's been tested and proven by more than a few folks,
>and all that I've from or about can attest to the stability.

Ok, Howard. I'll "try" and remove the urge to cut the board,
but it's gonna' be tuff :^). Anywho, thanks for your time and
remarks. They are appreciated!

72/73,

Randy Jouett, AB5NI

P.S.

Just got a call from the YL, and she wants me to help her
lay some ceramic floor tile. Off to get my hands dirty, and
I'll get back to anyone that has sent some e-mail this way
in later tonight or tomorrow.

Date: Thu, 23 Sep 1999 13:16:29 -0500
From: "Randy Jouett" <rules@bellsouth.net>
To: "John J. McDonough" <wb8rcr@arrl.net>, "Low Power Amateur Radio Discussion"
<qrp-1@Lehigh.EDU>
Subject: [51108] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <031601bf05f3\$15b77680\$46e498cd@spock>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: John J. McDonough <jjmcd@tm.net>
To: rules@bellsouth.net <rules@bellsouth.net>; Low Power Amateur Radio Discussion

<qrp-1@Lehigh.EDU>

Date: Wednesday, September 22, 1999 6:45 PM

Subject: Re: 2N2/40 VFO and Stray Capacitance

Hi John,

>I think you'll be hard pressed to see any difference. First of all,
>remember that you don't have 'traces' in the classic sense. Sure, there is
>capacitance across the pads themselves (see K7QO's study of this), and there
>is capacitance from the parts to the upper foil. But both of those are tiny
>compared to the capacitance between the sides of a double sided circuit
>board; the parts are far from the foil and the pads have little area. Since
>it's protected from the circuit by the upper foil, I doubt the lower foil
>enters into the equation at all.

Thanks for the info, John! Great to know that I have nothing to worry about. Have another question. Can I use double-sided pc board for the pads, too? If the super glue is an insulator(?), could the pad then be seen as a capacitor? I just started the TR switch, and I'm using double-sided board that I found at RS. I went looking for pc-board material on Saturday, and the local industrial supply house was closed, so I went over to RS, asked if they had any single-sided stuff, they said "Nope," so I got what they had, which was the double-sided stuff.

>Now, if you've looked at my web page, you can see I'm not the perfectionist
>Jim is. It's hard to believe my circuit works at all.

I have, John, and I have to say that I'm glad to see that you don't suffer from obsessive-compulsive disorder like Jim and I do :^) :^). Seriously, I guess you can say that the thing works, and success is a hard point to argue! Good for you, bro!

[snip]

>Ok, I don't have fancy test
>equipment, but the total drift has to be in the order of a few tens of
>cycles at most, or I would have detected it. If you can make a few percent
>improvement in this by carefully carving away the foil are you really going
>to be able to tell?

Probably not, but you gotta' understand something about me and many others out there that would take the time to cut the

foil away: we all have this uncontrollable urge to do something like this, because scientific fact tells us it's the "correct" way to do this, even if it's a complete waist of time :^). For instance, when I hack a piece of code out in some esoteric language and have the thing working properly, I'll print it out, look at it and say, "Can it be improved algorithmically or with in-line assembly language," even if the thing is going to run on one of those new fangled super computers and a profiler says forget it! :^). A lot of people might wonder why I'd even continue after this point, but I've found that if I do things this way I really get a good look at the situation and might possibly come up with a better way of doing things because I've been paying attention to details. Also, I've done it this way for many, many years and found that it's a good way to do most design work for moi' :^). May the Lord help me if I have a bug in my code -- no sleep until it's removed :^).

>I am tempted to enclose the VFO, however. First, because on the first radio
>I got some parasitics as I moved the front panel cabling around, and the
>second will be for 20, so the problem should be worse. But secondly, I
>noticed that I can cause the oscillator to move appreciably by blowing on
>it. I expect I'm differentially cooling the parts, but it would seem that
>shielding the VFO from breezes inside the cabinet might be worthwhile.
>(It's also not clear to me whether it's the 2N2222 part of the VFO or the
>Epson oscillator that's moving).

Interesting thoughts, John. I've also considered enclosing the VFO, and I even contemplated using a mini-Altoids box for the job :^). Unfortunately, I don't have any pass-thru capacitors laying around the shack, and I'm trying to scrounge as much of the rig as I can. I am going to place an order with Dan's Small Parts and get the kit, but I plan to only use the parts that I absolutely can't find, because I'm thinking about build another one for 30 mtrs :^).

Speaking of pass-thru caps, I've been wondering if anyone has tried this: Has anyone tried building a VFO shield out of double-sided pc board and etching a pass-thru cap on the surface of the thing? I thought about it for a while, but came to the conclusion that the idea wasn't too sound thermodynamically. The delta temp from the inside of the shield compared to the outside would probably be too great and cause some problems. OTOH, is this worth worrying about in a pass-thru cap? So, as usual, my "National Equiring" mind wants to know if it will work? :^)

>So in a very long winded way what I'm saying is - don't bother!

I was very tempted to snip the entire message, leave this one line, and reply "OK." :^) :^). I'm sure I would have won a ton of kudos from the guys reading the digest version of QRP-L, but my frustrated-writer mind kicked in and said forget it! :^). Hmmm. Another sign of obsessive-compulsive disorder? :^).

Anywho, thanks for your reply, John, and I hope to work you and your 2N2/40 some time in the not-to-distant future!

72/73,

Randy Jouett, AB5NI

Date: Thu, 23 Sep 1999 13:17:39 -0500
From: "Randy Jouett" <rules@bellsouth.net>
To: "Larry Przyborowski" <lprzyski@erols.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [51109] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <031701bf05f3\$17389840\$46e498cd@spock>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Larry Przyborowski <lprzyski@erols.com>
To: rules@bellsouth.net <rules@bellsouth.net>; Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Wednesday, September 22, 1999 6:36 PM
Subject: Re: 2N2/40 VFO and Stray Capacitance

Hi Larry and everyone that posted a response to my query!

>> I started throwing together a 2N2/40 today,
>> and I have a couple of questions concerning
>> the possibility of stray capacitance from the

>> use of a double-sided pc board and Manhattan
>> construction pads.
>
>No need to worry about this when using "manhattan" construction. The stray
>capacitance won't enter into the picture since all your connection pads are
>above a continuous ground plane, and there are no "circuit foils" to speak
>of.

Thanks for the info! I was kinda' wondering about this
and was just being my normal, overly-analytical self :^).
Hmmm. Maybe I should have gotten my Ph.D.. in theoretical
physics? :^).

72/73,

Randy Jouett, AB5NI

Date: Thu, 23 Sep 1999 13:22:39 -0500
From: "Randy Jouett" <rules@bellsouth.net>
To: "Nick Kennedy" <nkennedy@cswnet.com>, "Low Power Amateur Radio Discussion"
<qrp-l@Lehigh.EDU>
Subject: [51110] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <031901bf05f3\$1d4a8cc0\$46e498cd@spock>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Nick Kennedy <nkennedy@cswnet.com>
To: rules@bellsouth.net <rules@bellsouth.net>; Low Power Amateur Radio Discussion
<qrp-l@Lehigh.EDU>
Date: Wednesday, September 22, 1999 7:08 PM
Subject: Re: 2N2/40 VFO and Stray Capacitance

Hi Nick,

>I wondered about exactly the same thing when I started my 2N2/40 and also
>considered etching off the bottom of the VFO area. But the tests of running

>models showed them to be pretty stable. and when I thought about it, I
>realised that both the top and bottom foils are actually at ground
>potential, so capacitance between them oughta be N/A.

Thanks for the info, and I'll try to hold back my
obsessive-compulsive disorder and not cut the
underside of the board. Something tells me that
it's going to win out in the long run, though :^) :^).

72/73,

Randy Jouett, AB5NI

Date: 23 Sep 1999 12:49:18 EDT
From: Lamborn@onlinecol.com
To: qrp-l@lehigh.edu
Subject: [51111] Scope Manual needed
Message-ID: <199909231844.0AA127904@nss4.cc.lehigh.edu>

The Tecktronics 441 0 Scope I found at Ft. Tuthill a year ago at a very
low price has stopped working. It has no trace. My QRP elmer Brian,
W5VBO is going to look at it but we need some documentation. Can anyone
point us in the right direction? Although this may be an example of you
get what you pay for, it is dissapointing to lose the scope just as I
was planning to build the Elmer 101 SW40+ and then the NC20. (Obligatory
qrp content).

Thanks

Steve KI0KY Hotchkiss, CO QRP-L 1303

Date: Thu, 23 Sep 1999 14:59:32 -0400 (EDT)
From: Chris Cartwright Sr <ccart@phideaux.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [51112] Also in QST...
Message-ID: <Pine.LNX.4.04.9909231453110.24883-100000@dns.phideaux.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Since Mr. Green was mentioned, did anyone else notice our own AB0CD "up front", and the article by L.B, W4RNL? I haven't check, but I think there has been at least one QRP-Ler in at least half of the issues over the past two years. Quite a record from such a *small* group. Congrats guys.

-- Chris Cartwright, Technical Engineer | ccart@phideaux.com --
-- N3XRV ARRL-VE Norcal Zombie #163 | Gaithersburg, MD FM19je --
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --

Date: Thu, 23 Sep 1999 19:15:44 GMT
From: "Bill Todd" <zapzap73@hotmail.com>
To: qrp-l@lehigh.edu
Subject: [51113] Test - do not read
Message-ID: <19990923191544.37194.qmail@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Hello -
Just testing my new QRP-L subscription at my portable location. I don't want to miss a single minute of the excitement!!

Bill-N7MFB/7

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Thu, 23 Sep 1999 15:17:28 -0400
From: James Owen <james.owen@nist.gov>
To: qrp-l@lehigh.edu
Subject: [51114] Re: Hf conditions.....?
Message-ID: <37EA7CC7.B956741D@nist.gov>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well now both of you have experienced an Aurora. The next time it happens check 6 meters if you have it or even 10M. Last night the mag. field got hit pretty hard and produced the aurora. I was NCS on the Va. Fone Net and for a while thought I wasn't going to be able to complete it. It didn't seem to effect the D layer a lot as it usually does but the flutter made it very hard to copy some stations. Some stations were 20Db

over on the meter but sounded like s5. Some had a flutter of a few cycles and were not hard to copy, others were up to 10 cycles and almost impossible. One station came on and told us to go to 6 meters where he had just worked Alaska and said the NW was coming in. Others said to check 10m which I did. Nice signals from VK's and ZL's and a few JA's. Even 2M SSB had DX.

72 Jim K4CGY qrp-1 #72

Dave Pomeroy wrote:

>

> Being a new operator I never heard the flutter before.

> I also thought that my K2 was having a problem. I

> feel better now that someone else heard it.

> Dave KL0TE/8

>

> > I've never heard flutter as I did last night on 40

> > meters.

> > The flutter had a frequency of about 10 herz; heard

> > it

> > mainly on 40, less on 30 and 20 meters. Thought

> > something

> > was wrong with my K2 (spilled beer on it yesterday).

> > I knew

> > all was alright later in the night when the

> > "flutter" faded away.

> > I mean it was Rod Serling stuff...

> >

> > Dieter WB8QYY

Date: Thu, 23 Sep 1999 15:32:56 -0400

From: "Mike Yetsko" <myetsko@insydesw.com>

To: <dsirait@centrin.net.id>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [51115] Re: 1:1 SWR

Message-ID: <00f601bf05fa\$754e6ca0\$9001a8c0@wn.net>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Well, IDEALY a tuner is nothing but reactive components, and a purely reactive component won't disapate power.

When you have a mismatch in the line, the power doesn't get 'lost' directly from the mismatch. Think of it as a percentage of

the power reflecting back down the line, then back up the line, then back down, and so on. When it's matched, the percentage reflected is much less.

At high power levels there's also I^2R losses from current peaks in the feed line, which is power actually lost as heat in the wire. And at the voltage peaks there could be other anomalies.

Use a tuner? Well, no tuner is a 'perfectly reactive only' device, but usually they do better than not having one, since the most efficient power transfer occurs when source impedance equals load impedance. The mismatch there causes the amount of power going out to reduce.

Bottom line is use a tuner if it helps, don't use it if it doesn't. But usually, with a well designed quality tuner, the degrading will be minimal, and not of a concern, while the benefits could range from not perceptible to fantastic.

I'm not personally worried about the theoretical 1:1 match. That's bogus in a lot of cases anyway. Consider, what's the characteristic impedance of a $1/4$ wavelength over a ground plane at resonance? About 37 ohms, which is about 1.5:1 anyway. What about a dipole in free space? About 72 ohms, again about 1.5:1. What about a rhombic? Isn't that about 450 ohms if it's terminated? I can't remember. And resonance for antenna performance is much more desirable than impedance. Hey, a 50 ohm antenna is a perfect 1:1 match, right? (And yes, I know I know, that's not purely reactive...)

Mike
N1DVJ

From: Donny <dsirait@centrin.net.id>

> > Maybe there's a bit of obsessive compulsive in me?
> >
> > Whatever the math/physics says, my log book is
> > littered with QSO's that I am *convinced* I would
> > never have made had it not been for that last little
> > tweak on the antenna tuner to get it down to 1:1
>
> Personally I don't like using tuners since there will
> be some losses involved (at QRP levels you are
> likely want to radiate all your RF if possible??)
> I'm not an expert on physics and or electronics but
> according to my experience a mismatch between the
> transceiver impedance and the antenna impedance

> will produce losses and with the aid of a tuner you'll
> bridge the difference and makes everybody happy
> as long as the antenna is resonant on the operating
> frequency otherwise the losses will be too much
> and we are not radiating milliwatts but probably
> microwatts from the antenna.
>
> Ask the experts what loss a mismatch of SWR 1,5
> will do to a 5 watt RF and convert that to db you'll
> find that it is not too bad at all but when the propagation
> is not cooperating then you better switch off your radio
> and watch TV with your family.
>
> 72 de Donny YB6LD/1 qrp-1 # 2004

Date: Thu, 23 Sep 1999 14:41:19 cdt
From: wj5o@juno.com
To: homebrew@qth.net, QRP-L@LEHIGH.EDU
Subject: [51116] Plaudits for BIRD
Message-ID: <19990923.144121.-951675.0.WJ50@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Hi All,

I want to say how great it is that a company will support a piece of test equipment that was manufactured 43 years ago.

Mike O'Leary of the Bird Electronic Corp is sending Me a manual for the Bird Wattmeter Mod 6250 at no cost.

Now that is TRUE support for the Electronic Technicians of the world and I say "hats off to the Bird Electronic Corp" on behalf of Amateur Radio Operators everywhere.

This Wattmeter reads to 250 Milli Watts --- Wow! QRP type.

73 Bill "Sparkling City by the Sea" WJ50/B 28.289MHz
 Corpus Christi, Texas

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Date: Thu, 23 Sep 1999 13:05:52 -0700 (PDT)
From: Paul Erickson <paule@sfu.ca>
To: qrp-1@lehigh.edu (qrp)
Subject: [51117] re: QRP+ / paddles etc.
Message-ID: <199909232005.NAA16942@fraser.sfu.ca>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Bruce,

> Some other post-contest notes:
>
> 2. I need a very small low-drain memory keyer. Suggestions?

How small do you need? Smaller than the cmos III?

>
> 3. My QRP+ has a big AGC overshoot problem. Strong signals
> really kick it, and it takes 1 or 2 seconds to recover.
> Meantime, the rcvr is deaf. Is it just my rig, or is this
> a known QRP+ problem?

This is a known problem. There are some mods to improve the situation, but it cannot be eliminated completely. the mods appeared in the QRP Quarterly a couple of years back. If you can get ahold of them, let me know, and I'll try to dig them up for you.

> 5. The Bencher paddle is very heavy. Is there a small,
> rugged, iambic paddle with a good feel out there?

I use a G4ZPY 3in1 paddle which is nice and small with a magnetic base that attaches to the bottom of the qrp+ when the foot is down.

> God, I love this stuff!
>
> -Bruce, AA5B
> Albuquerque, NM

cheers, Paul - VE7CQK - email: paule@sfu.ca

Date: Thu, 23 Sep 1999 16:04:45 EDT
From: charles k brown <n4so@juno.com>
To: qrp-1@lehigh.edu
Subject: [51118] PIXIE II mods//long text file
Message-ID: <19990923.200229.7511.2.n4so@juno.com>

Discussion of mods for the PIXIE II and changes of inductance values for all HF bands. Various Pixie II topics.

Ask for "Pixie text file" and I will send it to you from this computer.

Ken Brown N4SO
Mobile, AL/EM50tk
NorCal-20/5 watts/4 ele. beam
EA1CHC/QRP Javier with 300 milliwatts worked on the NorCal 20.

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Date: Thu, 23 Sep 1999 16:18:19 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu
Subject: [51119] QRP+ MOD ARTICLES
Message-ID: <4d58e4d2.251be50b@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

For a list of articles for QRP+ MODS go to
<http://www.qsl.net/~wd8rif/archives.htm>

Alan KB7MBI

Date: Thu, 23 Sep 1999 16:29:30 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@lehigh.edu

Subject: [51120] LOOKING FOR OLD QRP-L ARTICLES
Message-ID: <5c8898ee.251be7aa@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

For the new folks, this may be a good reference for old technical articles
from QRP-L: <http://www.qsl.net/~wd8rif/archives.htm> Alan KB7MBI

Date: Thu, 23 Sep 1999 16:41:13 EDT
From: charles k brown <n4so@juno.com>
To: qrp-l@lehigh.edu
Subject: [51121] Tube Transmitter Kits
Message-ID: <19990923.203928.2207.1.n4so@juno.com>

Antique Electronic Supply
6221 S. Maple Ave.
Tempe, AZ 85283
info@tubesandmore.com
Melinda or Dwight
+1-602-820-5411
Note: Tube transmitter kits,
Broadcast receiver kits, parts, supplies.

The following is a saved text file.

From: Melinda Bradney <info@tubesandmore.com>
Date: Thu, 23 Sep 1999 11:30:02 -0700
Subject: Re: Catalog request

Our K-488 transmitter kit is \$29.95 plus s/h.

Dwight
Antique Electronic Supply
^^^^^^

antique.txt

Ken Brown N4SO
Mobile, AL/EM50tk
NorCal-20/5 watts/4 ele. beam

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Date: Thu, 23 Sep 1999 16:41:15 EDT
From: charles k brown <n4so@juno.com>
To: qrp-1@lehigh.edu
Subject: [51122] Tektronix Manuals/Parts
Message-ID: <19990923.203928.2207.5.n4so@juno.com>

You can get Tektronix manuals from a number of different sources.
The first one on the list has been recommended as a source for parts--
this is a saved text file.
Try:

Deane Kidd, W7TYR
27270 S.W. Ladd Hill Road
Sherwood, OR 97140
503-625-7363

Ed Matsuda
Test Equipment Manuals
P.O. Box 390613
San Diego, CA 92149
619-479-0225/FAX 619-479-1670
ematsuda@themall.net

Manual Merchant
2475 Loring St.
San Diego, CA 92109-2348
619-490-9076

Manuals Plus
P.O. Box 549
Tooele, UT 84074

I've bought manuals from several of these sources and have been satisfied
with the service..

Darrel, WD6BOR
nnnn

Ken Brown N4SO
Mobile, AL/EM50tk
NorCal-20/5 watts/4 ele. beam

Get the Internet just the way you want it.
Free software, free e-mail, and free Internet access for a month!
Try Juno Web: <http://dl.www.juno.com/dynoget/tagj>.

Date: Thu, 23 Sep 1999 14:22:38 -0400
From: "wayne reed" <wlreed@custom.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [51123] Old Crystals
Message-ID: <013b01bf05fe\$f3900fc0\$324961ce@q7c8d5>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Guys,

I am cleaning out the shack. The XYL is a ham [KA9EYE] but doesn't cut much slack! One of the things I located was 26 crystals in FT-241A holders. You remember, the big bakelite ones with two screws holding it together.

These have 'channel' markings = channel 1 = 20.1 Mc [MHz for those in California - I can provide a conversion chart Mc to MHz] channel 36 = 36.1 Mc.

Any one interested? Do you know where they came from? Does someone want them to grind and use on 15 m and up??

I am sorry, I have no idea if they have any value, please e-mail me direct

Wayne, k9ne
wlreed@custom.net

Date: Thu, 23 Sep 1999 16:58:21 EDT
From: K2UD@aol.com
To: rules@bellsouth.net
Cc: qrp-l@lehigh.edu
Subject: [51124] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <87033d81.251bee6d@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

One thing I did with my 2N2s is encapsulate all the toroids with 5-minute epoxy. Dries hard as a rock, and may be a reason why my VFO doesn't drift when I blow on it (yes, I've tried it too!). The trick is to get the coil where you want it in frequency, you have to play with it if you are adding the RIT, and then encapsulate it.

In other rigs I have NOT done this, and they do drift! I'd like to hear from others who build the 2N2 without encapsulating the VFO toroid, do they drift when going through temperature extremes?

72 all

Howard Kraus, K2UD

Date: Thu, 23 Sep 1999 17:24:24 -0400
From: Michael <mike_mhe@compuserve.com>
To: "Lehigh, Messages" <qrp-1@Lehigh.EDU>
Subject: [51125] RE:K5FO / K7QO THANKS!
Message-ID: <199909231724_MC2-8615-3BB@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
 charset=ISO-8859-1
Content-Disposition: inline

Hello to all writers,

thank you for your help. I found the K7QO webpages.

73, Mike, DF20K

Date: Thu, 23 Sep 1999 17:36:36 -0400
From: "Jim Kortge, K8IQY" <jokortge@prodigy.net>
To: leinwebe@mcmail.cis.McMaster.CA
Cc: qrp-1@lehigh.edu
Subject: [51126] Re: Manhattan pad capacitance
Message-ID: <3.0.1.32.19990923173636.00743ecc@pop.prodigy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 12:32 PM 9/23/99 -0400, Glen, VE3DNL wrote:

>Many have posted that the paddy board
>capacitance is negligable - just what *IS*
>the capacitance?
>We need to know something about a "paddy"
>to calculate its capacitance; length, width,
>thickness, and dielectric constant of
>glass-epoxy (I recall its about 4.5 times
>that of air?).

>Let's define a "paddy" as being 4mm long
>and 2mm wide. That's pretty big, so our
>capacitance may be on the high side. PCB
>material is usually 1/16" thick (1.58mm).

The two sizes that I have used are rectangular pads from an ADEL nibbling tool and round pads from a Harbor Freight punch. The ADEL pads measure 3/32 X 1/4 inch (2 X 7 mm) and the round pads measure 3/16 inch (5 mm) diameter.

>
>Capacitance (farads) = $E0 \cdot k \cdot A / \text{thickness}$
>where $E0$ is permittivity of free space
>and is 8.854×10^{-12}
> k is dielectric constant of glass/epoxy = 4.5?
> A is area in square m.
>thickness is also metric.
>
>This works out to be 0.2 picofarads, between top
>of paddy to the groundplane underneath.
>This calculation ignores any fringe fields
>that extend beyond the paddy's edge - a
>fair assumption. Also ignored is the thin layer
>of cyano-glue. This would likely decrease
>capacitance by a tiny amount.

Correspondingly, the rectangular pad computes at 0.38 pF and the round pad at 0.45 pF. I've also measured a single rectangular pad at 0.5 pF and a round pad at 0.6 pF with an AADE Capacitance meter, so the computed values are not that far off. The difference is probably due to some field fringing, and measurement error.

>
>BTW: if you use double-sided PCB with this
>manhattan construction, you'll end up with TWO
>groundplanes. Good practice says to connect
>these together, all around the outside edges.

Glen is correct. If using double sided board, connect the two sides in several places around the edges.

Thanks to Glen for the nice theoretical presentation. He does such a great job with this sort of thing.

72 and happy 2N2/40 building to all.....Jim, K8IQY

Date: Thu, 23 Sep 1999 17:35:17 -0400
From: "ai2q" <ai2q@ispchannel.com>
To: <K2UD@aol.com>, "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [51127] RE: 2N2/40 VFO and Stray Capacitance
Message-ID: <000b01bf060b\$883d7840\$5c32a7d0@ai2q.ispchannel.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Howard, and the group:

I didn't use any glyptol, Q-dope, epoxy, or glue, and my VFO is really stable. It doesn't seem to move in frequency very much when I change lead dress either, but I did notice I could pull its frequency when I put a high power speaker magnet near it! Hee. Hee.

Vy 73, AI2Q, Alex in Kennebunk, Maine .-.-.

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of K2UD@aol.com
Sent: Thursday, September 23, 1999 4:58 PM
To: Low Power Amateur Radio Discussion
Subject: Re: 2N2/40 VFO and Stray Capacitance

One thing I did with my 2N2s is encapsulate all the toroids with 5-minute epoxy. Dries hard as a rock, and may be a reason why my VFO doesn't drift when I blow on it (yes, I've tried it too!). The trick is to get the coil where you want it in frequency, you have to play with it if you are adding the RIT, and then encapsulate it.

In other rigs I have NOT done this, and they do drift! I'd like to hear from others who build the 2N2 without encapsulating the VFO toroid, do they drift when going through temperature extremes?

72 all

Howard Kraus, K2UD

Date: Thu, 23 Sep 1999 17:51:43 -0400
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: QRP-L Discussion Group <QRP-L@Lehigh.edu>

Cc: "W.D.(Doc)Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [51128] HELP--Info on "Front End Saver"
Message-ID: <199909231754_MC2-860C-FFA3@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain;
charset=us-ascii
Content-Disposition: inline

Dear Gang:

Sometime ago I saw in one of the ham journals a brief mention of a product called something like "Front End Saver". As I recall, this unit will sense RF like from a nearby transmitter and protect the sensitive front end of a receiver.

Can anyone help me with the name of the manufacturer? Thanks in advance for any assistance you can give :-).

72,
--Doc Lindsey/K0EVZ
DSBF
PO BOX 6028
Bismarck, ND 58506
70511.3041@compuserve.com

Date: Thu, 23 Sep 1999 17:54:45 +0000
From: "Steven Weber" <kdljv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [51129] Re: 2N2/40 VFO and Stray Capacitance
Message-ID: <199909232236.SAA25792@moose.ncia.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

While the pad to ground plane capacitance isn't to worry about, one should try to keep component lead length as short and direct as possible, especailly by-pass caps. Route power wires next to the ground plane and keep them away from active circuits.

Some of the strange problems encountered could be from excessive lead lengths causing VHF oscillations. Neatness does count in this type of construction, or at least helps a lot.

72,

Steve, KD1JV in the white Mountains of New Hampshire
"melt solder"

End of QRP-L Digest 1587
